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TESIS DOCTORAL

MODELO CONCEPTUAL DEL COMPORTAMIENTO DE CO-CREACIÓN DE VALOR DEL ESTUDIANTE BASADO EN EL ENFOQUE DE LA LÓGICA DOMINANTE DE SERVICIOS, CONSIDERANDO LA DINÁMICA Y COMPLEJIDAD DEL ECOSISTEMA DE SERVICIOS

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Content

Dedicatorias y agardecimientos

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Resumen

Introducción

La Educación Superior (ES) ha sido reconocida desde hace tiempo como un pilar fundamental para el desarrollo social y económico de las naciones. En un mundo cada vez más complejo y globalizado, la formación de ciudadanos capacitados y críticos es esencial para afrontar los retos actuales. De ahí que la ES no solo proporcione conocimientos y competencias específicas, sino que también desempeñe un papel crucial en la formación de individuos capaces de contribuir al progreso y al bienestar de la sociedad en su conjunto (Gao et al., 2019; Krstić et al., 2020; Sánchez-Carrillo et al., 2021).

Sin embargo, en las últimas décadas, la ES ha sufrido una importante transformación debido a la creciente influencia de la lógica de mercado en su funcionamiento. En este sentido, la creciente "mercantilización" condujo a varios desafíos y preocupaciones en relación con su valor social y propósito original (Judson y Taylor, 2014; Schelble, 2006). En un contexto de mercado competitivo, las Instituciones de Educación Superior (IES) públicas y privadas a menudo se ven presionadas a adoptar prácticas comerciales y estrategias genéricas de marketing para atraer y retener a los estudiantes. Esto puede conducir a una visión más comercial y utilitarista de la educación, en la que los estudiantes son percibidos como clientes y la educación se convierte en un producto (Díaz-Méndez y Gummesson, 2012; Elsharnouby, 2015; Seeman y O'Hara, 2006).

En detrimento de un enfoque más holístico que abarque el desarrollo integral del individuo y su capacidad para contribuir al bien común, han surgido teorías y enfoques que consideran las particularidades de la ES, potenciando su estudio y comprensión de su naturaleza, tal es el caso de la Lógica Dominante del Servicio (SDL), la Co-creación de Valor y el ecosistema de servicios, propuestos por Vargo et al. (2008) y Vargo y Lusch (2016, 2017). Estos enfoques han designado valiosos marcos conceptuales.

En primer lugar, el enfoque de ecosistema de servicios ha sido altamente relacionado con la ES a nivel mundial (Nie et al., 2019; Vargo et al., 2015), como un concepto tomado de la biología para comprender mejor las interacciones entre actores (componentes vivos) y factores (componentes no vivos) como miembros de un todo, generando una interacción y cooperación activa. Estos ecosistemas han sido definidos por Vargo y Lusch (2014, p.24)

como un "sistema relativamente autónomo y autoajustable de agentes integradores de recursos conectados por acuerdos institucionales compartidos y la creación mutua de valor a través del intercambio de servicios". El concepto anterior enfatiza el dinamismo del servicio y la participación de todos sus actores y arreglos institucionales, generando valor para sí mismos y para otros y su contribución al funcionamiento y sostenibilidad del ecosistema.

Desde la perspectiva del SDL, la educación no es una mera transacción entre el proveedor y el cliente, sino una colaboración activa en la que el estudiante desempeña un papel central (Díaz-Méndez y Gummesson, 2012; Gu y Wang, 2022). El ecosistema de servicios de ES está formado por múltiples actores, entre los que se incluyen estudiantes, profesores, administradores y empleadores, que interactúan para crear valor conjuntamente durante el servicio educativo. En este sentido, la co-creación de valor como premisa del SDL cobra relevancia, ya que considera involucrar a los estudiantes como actores clave en la creación de valor (Vargo et al., 2015).

Abordar el enfoque de la co-creación de valor es, por tanto, una perspectiva prometedora para involucrar activamente a los estudiantes en su proceso de aprendizaje, convirtiéndolos en cocreadores de su experiencia educativa (Thomas y Ambrosini, 2021). La idea de que los estudiantes no son meros receptores de conocimiento, sino actores que construyen su conocimiento, representa un cambio significativo en la forma en que los expertos en marketing conciben tradicionalmente la educación (Bovill, 2020).

Sin embargo, la noción de co-creación de valor de la ES también plantea cuestiones importantes, especialmente en lo que se refiere a la separación del comportamiento de co-creación de valor del cliente (CVCB) del estudiante. Aunque existen similitudes entre las dinámicas de servicio en los ámbitos comercial y educativo (Hemsley-Brown y Oplatka, 2006), también es crucial reconocer las diferencias y particularidades de este último, para evitar reducir la educación a una mera transacción comercial, centrada únicamente en la satisfacción a corto plazo y las expectativas inmediatas, y contaminando el valor social intrínseco de la educación (Díaz-Méndez et al., 2019).

La participación de los estudiantes en la generación de valor durante su experiencia de formación y servicio profesional en ES implica que los estudiantes participen en actividades y esfuerzos de compromiso especializados y de alto nivel que enriquezcan su educación (Dollinger et al., 2018). Para estudiar y comprender mejor el papel del estudiante

como co-creador de valor durante las actividades académicas, se puede considerar el marco del Comportamiento de Cocreación de Valor del Estudiante (SVCB), hasta ahora, se ha adaptado principalmente del comportamiento del cliente (Botti et al., 2017; Tommasetti et al., 2015, 2017).

Basándose en lo anterior, para desarrollar un modelo conceptual de SVCB desde la perspectiva del SDL y la teoría del ecosistema, esta investigación integra tres fases interrelacionadas. En la primera fase, se llevó a cabo una exploración detallada de la SVCB actual en un ecosistema específico de la ES. Para ello, se adaptó la escala de comportamiento de co-creación de valor del cliente, desarrollada por Tommasetti et al. (2017) para evaluar su aplicabilidad en el contexto del servicio educativo superior. Esta adaptación se llevó a cabo para verificar la necesidad de construir una nueva escala que no considere al estudiante como cliente en un ecosistema de servicios altamente mercantilizado.

La segunda fase de la investigación se centra en identificar la complejidad intrínseca del ecosistema de servicios de ES. Para ello, se analiza la influencia de los procesos, los acuerdos institucionales y las relaciones en la cocreación de valor en este ámbito. La exploración se dirige hacia la perspectiva de los diversos actores implicados en la implementación y operacionalización de la corresponsabilidad y el valor en uso, para comprender la complejidad de este ecosistema.

Una vez considerada la complejidad del entorno educativo, la tercera y última fase se centra en determinar las actividades cognitivas y conductuales de los estudiantes que conforman el modelo conceptual propuesto de Comportamiento de Co-creación de Valor del Estudiante. Este objetivo se consigue integrando el conocimiento y la experiencia de los actores implicados en las actividades académicas y de gestión. La recolección de datos se realiza a través de entrevistas en profundidad y talleres de co-creación con todos los participantes del ecosistema, incluidos los estudiantes, y el análisis de los resultados se realiza utilizando ATLAS. ti 9, para la triangulación de categorías aforísticas y emergentes para la generación de la propuesta de modelo.

Definición del fenómeno de estudio

El fenómeno científico: los estudiantes de Educación Superior valoran el comportamiento de co-creación, considerando la complejidad del ecosistema de servicios.

Objetivo General

Desarrollar un modelo conceptual del Comportamiento de Co-creación de Valor del Estudiante de Educación Superior desde la perspectiva de la teoría de la Lógica Dominante del Servicio y el enfoque del ecosistema de servicios, integrando las actividades conductuales y cognitivas requeridas durante la interacción académica, para contribuir a mantener el valor social de la Educación Superior.

Objetivos especifcios

- OE1.Explorar el comportamiento actual de cocreación de valor de los estudiantes en un ecosistema específico de la ES mediante la adaptación de la escala de comportamiento del cliente de concreción de valor de Tommasetti et al. (2017) para verificar la aplicabilidad en el ecosistema de servicios de Educación Superior.
- SQ2. Identificar la influencia del proceso, los arreglos institucionales y las relaciones sobre la cocreación de valor de la Educación Superior, a través de la exploración involucrada la perspectiva de los actores sobre la implementación y operacionalización de la corresponsabilidad y el valor en el uso, para considerar la dinámica del ecosistema.
- OE3. Integrar el conocimiento y la experiencia de los actores involucrados en las actividades académicas y de gestión, a través de entrevistas en profundidad y talleres de co-creación con todos los actores del ecosistema, incluidos los estudiantes, para identificar las actividades cognitivas y de comportamiento necesarias y esperadas durante las actividades académicas para co-crear valor en un ecosistema complejo.

Pregunta general de investigación

¿Cuáles son las actividades conductuales y cognitivas esperadas durante la interacción académica que integran el modelo conceptual de comportamiento de co-creación de valor del estudiante en el complejo ecosistema de servicios de Educación Superior?

Preguntas especificas de investigación

- SQ1. ¿Cuál es el comportamiento actual de co-creación de valor de los estudiantes durante la interacción en actividades académicas en el ecosistema de servicios de Educación Superior?
- SQ2. ¿Cómo influyen los procesos, los acuerdos institucionales y las relaciones en la co-creación de valor en el ecosistema de servicios de Educación Superior?
- SQ3. ¿Qué actividades cognitivas y comportamentales consideran los actores del ecosistema de servicios de la Educación Superior para la co-creación de valor la participación del estudiante como co-creador?

Proposicion teorica

El valor esperado en la ES recae en los estudiantes y se refleja en el desarrollo de habilidades humanas, la apropiación de conocimientos disciplinares, el desarrollo de competencias profesionales y el mejoramiento de su vida laboral. Por estas razones, su comportamiento cocreador implica una participación profunda y especializada durante las actividades académicas.

Por lo tanto, considerando la complejidad del ecosistema, se propone un modelo teórico SVCB en el ecosistema de servicios de ES, que considera el nivel necesario de interacción, compromiso y esfuerzo personal de las actividades cognitivas de los estudiantes (coproducción, valor en uso, compromiso, autoaprendizaje y pensamiento crítico), permitiendo así el desarrollo de habilidades humanas y competencias profesionales-disciplinares (objetivos de mediano y largo plazo) y no sólo la satisfacción estudiantil como elemento de captación, retención y graduación.

Proposicion teorica genral

GTP. Modelo teórico para el SVCB: La atención se centra en la creación de un modelo teórico distinto que haga recaer la responsabilidad de la creación de valor en los estudiantes. Esto implica no solo aspectos académicos, sino que también se extiende a la mejora de su vida laboral y a la contribución al desarrollo social y sostenible de su entorno.

Proposiciones teoricas especificas

- STP1: Cocreación a través de la transformación personal: Se hace hincapié en la participación de los estudiantes en el proceso de cocreación, lo que conduce a una transformación personal significativa. Se espera que esta transformación tenga repercusiones duraderas, lo que indica un cambio de enfoque de las ganancias inmediatas a los beneficios a largo plazo.
- STP2: Participación especializada de los estudiantes en la cocreación: Se espera que los estudiantes participen activamente en la cocreación asumiendo diversos papeles como cocreadores, codiseñadores y coproductores. El énfasis en el pensamiento autodidacta y crítico pone de relieve la importancia del aprendizaje independiente y la aplicación de los conocimientos en el contexto profesional específico de su disciplina.

Motivacion de la investigación

Desde que en 2004 el enfoque SDL irrumpiera en el panorama internacional, investigadores y académicos comenzaron a profundizar en una de las principales premisas sobre las que gira el enfoque de intercambio de valor basado en servicios: integrar la co-creación de valor, entendida como la consecución conjunta de objetivos dentro de la actividad económica (Vargo et al., 2008). Esta co-creación de valor implica determinados comportamientos y actividades por parte de todos los actores implicados en la consecución de objetivos comunes (Volkmann et al., 2021).

El enfoque SDL se ha aplicado en gran medida al ecosistema de servicios de ES (Autioz y Thomas, 2018; Gao et al., 2019; Díaz-Méndez et al., 2017; Kumari et al., 2020). Sin embargo, en un intento por comprender el comportamiento de co-creación del estudiante, se han implementado diferentes enfoques y modelos generales desarrollados para el cliente

de servicios. Esta práctica es denominada por diversos autores como mercantilización de la ES. Aboga por una estandarización de la gestión en los diferentes ecosistemas de servicios. Esta estandarización no necesariamente mejora el funcionamiento del servicio, al contrario, puede ser un contaminante del ecosistema como defienden algunos autores (Díaz-Méndez et al., 2017; Díaz-Méndez y Gummesson, 2012; Judson y Taylor, 2014; Schelble, 2006).

Hasta el momento, no se ha fundamentado en la literatura un modelo específico de SVCB enfocado a salvaguardar el valor social de la ES y su razón de ser dentro del desarrollo humano social, no se han desarrollado modelos para entender el SVCB de manera específica, y diferente al comportamiento del cliente. Esto representa una oportunidad de investigación para desarrollar un modelo teórico específico para estudiantes que difiera del de los clientes, integrando las actividades conductuales y cognitivas de los estudiantes necesarias durante la experiencia de aprendizaje y considerando la complejidad del ecosistema de servicios de ES para evitar contaminar el servicio con prácticas genéricas que pueden ser eficientes en otros ecosistemas, pero cuya implementación en ES podría representar una amenaza contaminante.

Estructura de la investigación

La estructura de la tesis se compone de VII capítulos interrelacionados que siguen una lógica secuencial para abordar los objetivos de la investigación. El capítulo I presenta la dirección de la investigación, comenzando con una introducción que sienta las bases para explorar el fenómeno de estudio, ofreciendo un contexto más amplio para subrayar la relevancia del tema. A continuación se define el fenómeno de estudio, especificando los límites y el alcance considerados en la investigación.

Se esbozan objetivos de investigación claros, delineando las metas específicas. Además, se plantean preguntas de investigación para guiar la exploración y el análisis. La proposición teórica establece el marco conceptual, proporcionando una base sólida para comprender el fenómeno. El capítulo concluye abordando las motivaciones y oportunidades que impulsan la investigación, destacando la importancia del tema y la relevancia práctica o teórica prevista de los resultados.

El capítulo II, "Revisión de la literatura", ofrece un análisis exhaustivo de los estudios previos pertinentes para contextualizar el estudio. Este capítulo incluye el "Marco teórico",

donde se presentan las teorías fundamentales que sustentan el trabajo, el "Marco referencial", que conecta los conceptos clave, y el "Marco contextual", que explica el contexto de la investigación. El capítulo III, "Fundamentos metodológicos", establece el marco metodológico del estudio, profundizando en elementos clave como la estrategia general de investigación y las particularidades del diseño de la investigación. En este capítulo se describen los procesos de recogida y análisis de datos.

Los capítulos IV, V y VI presentan los resultados de la investigación empírica realizada. En el capítulo IV, "Exploración del actual comportamiento de cocreación de valor de los estudiantes (Fase I)", se aborda la pregunta inicial de la investigación utilizando un enfoque cuantitativo y descriptivo. Se emplea una escala especializada para medir el comportamiento de co-creación de valor en las actividades académicas, proporcionando un examen detallado de cada dimensión de la escala para mejorar la comprensión del comportamiento de los estudiantes.

Los capítulos siguientes, V y VI, abordan respectivamente la segunda y tercera preguntas de investigación mediante metodologías cualitativas como las entrevistas semiestructuradas y la metodología Living lab con talleres de cocreación. Estos capítulos exploran la complejidad del ecosistema de servicios de la ES y determinan las actividades cognitivas y conductuales de los estudiantes como co-creadores de valor. Por último, el capítulo VII presenta las principales conclusiones e implicaciones de la investigación.

Revisión de la literatura

La Lógica-dominante de Servicio (SDL), se destaca su enfoque en la importancia del servicio en el marketing, considerando que el servicio es la principal fuente de valor en una relación de intercambio entre cliente y empresa. Se reconoce que en esta perspectiva, la creación y entrega de valor se centran en el servicio, siendo los bienes elementos de apoyo. Además, se enfatiza que la relación de intercambio entre cliente y empresa es una co-creación de valor, donde el cliente es un participante activo en el proceso. Esta perspectiva contrasta con la lógica tradicional centrada en los bienes, reconociendo que en muchos casos, el servicio es más importante para los clientes que los propios bienes físicos, y que la experiencia del

servicio es fundamental para construir la lealtad y satisfacción del cliente (Grönroos and Gummerus, 2014; Vargo and Lusch, 2014).

En el ámbito de la educación superior, la SDL se aplica para comprender las relaciones e interacciones entre universidades y sus actores, reconociendo a los estudiantes como co-creadores de valor. Se destaca la importancia de involucrar a los estudiantes en el diseño de cursos y programas, así como establecer asociaciones con empleadores para preparar a los estudiantes para el mercado laboral. Esta perspectiva busca crear experiencias educativas relevantes y valiosas para los beneficiarios, fomentando la colaboración, la co-creación y la relevancia en la educación superior (Encinas and Cavazos, 2016; Foroudi et al., 2018; Moreno and Calderón, 2017).

Además, se explora la perspectiva estática y dinámica de la educación superior, donde la estática se centra en la memorización y el aprendizaje pasivo, mientras que la dinámica enfatiza la adaptabilidad, la colaboración interdisciplinaria y la adopción de nuevas tecnologías y métodos de enseñanza para responder a los cambios en el mercado laboral y las necesidades de la sociedad (Bathmaker, 2017; Castro, 2019).

La co-creación de valor es un concepto central en la SDL, que reconoce la participación de los clientes en el proceso de creación de valor. Se resalta la importancia de la colaboración entre empresas y clientes, así como la personalización de las ofertas de valor para satisfacer las demandas y preferencias individuales de los clientes. Este enfoque desafía las nociones convencionales de provisión de servicios y promueve relaciones sólidas de largo plazo con los clientes (Grönroos and Gummerus, 2014; Prahalad and Ramaswamy, 2004).

Por último, se explora el comportamiento de co-creación de valor por parte de los clientes (CVCB), identificando dos tipos: el comportamiento requerido (en rol) y el voluntario (fuera de rol), y destacando su importancia en la generación de valor y la construcción de relaciones sólidas con los clientes. Se enfatiza la necesidad de comprender y utilizar el CVCB en el contexto actual de los ecosistemas de servicio en constante cambio (Tommasetti et al., 2017; Yi and Gong, 2013).

En cuanto a La teoría del Ecosistema de Servicio se refiere a la comprensión y análisis de los elementos interrelacionados e interdependientes que conforman un ecosistema de servicios. Este ecosistema se visualiza como una red compleja de entidades, incluyendo clientes, proveedores, socios, competidores, regulaciones y avances tecnológicos, entre otros,

que interactúan e influyen entre sí para crear valor para los clientes finales (Autio y Thomas, 2018; Lusch y Vargo, 2014).

En el contexto de la educación superior, el enfoque del ecosistema de servicios reconoce la naturaleza compleja e interconectada de los servicios en este sector. Implica considerar los diferentes componentes y actores en el entorno del servicio y reconocer la interacción entre estos componentes para crear valor para los estudiantes, la facultad y la institución (Nie et al., 2019; Richter et al., 2015).

Las instituciones de educación superior (HEIs) se ven como sistemas dinámicos donde los servicios, procesos y tecnologías se integran para crear una experiencia holística y sin problemas para los estudiantes. El objetivo es crear un ecosistema de servicios eficiente, efectivo y receptivo a las necesidades y expectativas de los estudiantes, la facultad y la comunidad en general (Autio y Thomas, 2018; Koskela-Huotari y Vargo, 2016).

El ecosistema de servicios de educación superior abarca una amplia gama de servicios, incluido el apoyo académico, la orientación profesional, la ayuda financiera, la vivienda estudiantil y muchos otros, con el objetivo principal de crear un entorno comprensivo y de apoyo que ayude a los estudiantes a tener éxito en sus objetivos académicos y profesionales (Voropai et al., 2019).

La educación superior es considerada un bien público con un gran valor social, ya que contribuye al desarrollo económico, social y cultural de la sociedad, promoviendo la movilidad social, la igualdad de género y la diversidad, y mejorando la salud y el bienestar de la población (Brown y James, 2020; Bathmaker et al., 2016; Smith, 2020; Flynn et al., 1990; Samad et al., 2022).

El ecosistema de educación superior es complejo y dinámico, compuesto por una variedad de actores y elementos, tanto vivos como no vivos, que interactúan e influyen entre sí, y está sujeto a diversos factores económicos, políticos, culturales y tecnológicos (Díaz-Méndez et al., 2019; Khan et al., 2022; Constantinides, 2022; Stromquist, 2002).

Aunado a lo anterior, La mercantilización de la educación superior es un proceso que transforma este ámbito en un sistema orientado al mercado, donde los estudiantes son vistos como clientes tradicionales, las universidades como productoras y la educación como una mercancía que se compra y se vende (Judson y Taylor, 2014). Este proceso implica la introducción de la competencia, la elección del consumidor y la toma de decisiones orientada

al mercado en la provisión de actividades académicas (Banwait, 2021; Schelble, 2006). Las universidades, en respuesta a la competencia creciente para atraer y retener estudiantes, están adoptando rápidamente estrategias de mercantilización (Hemsley-Brown y Lowrie, 2010; Molesworth et al., 2010). Sin embargo, esta priorización de la satisfacción del estudiante no siempre se traduce en una mejor formación académica (Molesworth et al., 2010).

Desde un punto de vista económico, la mercantilización de la educación superior se ve como una respuesta a la oferta y la demanda, estableciendo un mercado competitivo para el servicio educativo (Molesworth et al., 2010). Desde una perspectiva sociológica, se considera un reflejo de cambios sociales más amplios impulsados por el neoliberalismo y la globalización, lo que ha llevado a la comercialización de la educación y un mayor énfasis en la satisfacción del cliente y la elección individual (Salles-Djelic, 2006; Judson y Taylor, 2014).

Esto ha llevado a un cambio de énfasis en las instituciones, alejándose de proporcionar educación para el bien público y orientándose más hacia la educación como un bien privado (Dollinger et al., 2018; Schelble, 2006). Todo esto plantea preguntas fundamentales sobre los valores y objetivos de la formación académica, enfatizando la necesidad de mantener el ecosistema educativo como un espacio para la búsqueda del conocimiento y el desarrollo intelectual, en lugar de convertirlo en un mero producto transaccional (Judson y Taylor, 2014; King y Bunce, 2020; Schelble, 2006).

En cuanto al debate sobre la analogía estudiante-cliente, hay una polarización en la literatura. Algunos autores argumentan a favor de considerar a los estudiantes como clientes, destacando que las universidades deben aplicar estrategias de marketing para lograr una mayor cuota de mercado (Guilbault, 2016; Lo, 2017; Lowrie y Hemsley-Brown, 2011; Petruzzellis et al., 2006). Sin embargo, otros rechazan esta analogía, argumentando que puede ser perjudicial para la calidad de la educación y el verdadero propósito de las instituciones educativas (Driscoll y Wicks, 1998; Svensson y Wood, 2007; Wueste y Fishman, 2010).

En medio de este debate, algunos proponen un enfoque más equilibrado, reconociendo que la analogía estudiante-cliente puede ser apropiada para ciertos aspectos de la relación universidad-estudiante, pero no para otros (Koris y Nokelainen, 2015). Además, se propone un modelo híbrido que considere tanto el enfoque del consumidor como la

supervisión regulatoria para evitar una relación estrictamente mercantil con los estudiantes (Senior et al., 2017).

Las instituciones de educación superior (IES) de todo el mundo están trabajando más que nunca para mantenerse relevantes en la economía global en rápida evolución, razón por la cual la relación entre la co-creación de valor y las IES se está volviendo cada vez más significativa. Las IES ya no son vistas simplemente como instituciones educativas, sino como actores importantes en la economía del conocimiento que apoyan a las economías regionales y nacionales, así como a las sociedades y culturas (Grönroos, 2006; Vargo y Lusch, 2017).

La co-creación de valor se ha aplicado ampliamente en la educación superior, por ejemplo, en la calidad educativa, como lo perciben diferentes actores del ecosistema, como los empresarios y empleadores. Cavallone et al. (2021) exploran el concepto de calidad en la educación superior desde una perspectiva empresarial. Los autores argumentan que las IES pueden crear valor al centrarse en co-crear valor con sus estudiantes, profesores y otros actores. Además, identifican tres condiciones clave: una cultura centrada en el cliente, un enfoque en la mejora continua y el uso de la tecnología para facilitar la comunicación y la colaboración.

Otra investigación que conecta la co-creación de valor con el ecosistema de servicios de educación superior es desarrollada por Elsharnouby (2015), quien estudia qué constituye la satisfacción estudiantil con la experiencia universitaria y cómo el comportamiento de co-creación estudiantil se ve afectado por la satisfacción general del estudiante con dicha experiencia. Los resultados implican que la competencia percibida del profesorado y la reputación percibida de la universidad son los factores más importantes que influyen en la felicidad de los estudiantes con sus experiencias universitarias. Además, ofrecen evidencia empírica de la contribución directa que la felicidad estudiantil hace para fomentar la participación estudiantil y la conducta cívica.

Además, Smørvik y Vespestad (2020) examinan cómo el valor producido mediante la colaboración y el intercambio de recursos compartidos puede respaldar las experiencias en la educación superior. El artículo también demuestra cómo las estrategias de marketing pueden ser utilizadas para fomentar el aprendizaje. Los resultados muestran que la co-creación de valores puede influir en las percepciones de los estudiantes sobre el aprendizaje, contribuyendo así a nuevos métodos de pensamiento que se centran en la co-creación de valor

en la enseñanza al conectar las teorías de marketing y el contexto de aprendizaje de la educación superior.

Más recientemente, Tarı Kasnakoğlu y Mercan (2022) presentaron un estudio que incorpora recursos operantes como precursores para el desarrollo de una relación co-creativa. Los autores mencionan que la co-creación también se sugiere como un mediador entre los recursos y los resultados en el paradigma. Finalmente, la calidad de la relación entre estudiantes y profesores influye en esta.

De esta forma, la comprensión y aplicación de la Lógica-dominante de Servicio (SDL) en el contexto de la educación superior revela un cambio fundamental en la percepción de las instituciones de enseñanza, reconociendo a los estudiantes como co-creadores de valor. Este enfoque resalta la importancia de la colaboración, la personalización y la relevancia en la creación de experiencias educativas significativas.

Paralelamente, la teoría del Ecosistema de Servicio ofrece una perspectiva integral de la educación superior, reconociendo su complejidad y la interdependencia de sus diversos componentes. Sin embargo, el proceso de mercantilización plantea desafíos al transformar la educación en un servicio orientado al mercado, lo que suscita preguntas cruciales sobre los valores fundamentales de la educación y su propósito. En medio del debate sobre la analogía estudiante-cliente, surge la necesidad de un enfoque equilibrado que reconozca la importancia de la satisfacción del estudiante sin comprometer la integridad académica.

Metodología

Se utiliza una metodología mixta que combina enfoques cualitativos y cuantitativos para comprender la realidad social de manera más profunda y completa. Se basa en la noción ontológica de que la realidad es compleja y multifacética, lo que requiere una combinación de métodos y enfoques para comprenderla adecuadamente. La metodología mixta reconoce la subjetividad de los investigadores y la necesidad de ser reflexivos para evitar sesgos.

Además, se discute la epistemología de dos aspectos específicos en el contexto de la educación superior: el ecosistema de servicios de ES y el comportamiento de co-creación de valor del estudiante. Ambos se basan en enfoques constructivistas sociales que destacan la interacción social como generadora de conocimiento. En el caso del Ecosistema de Servicios, se hace hincapié en la importancia de un enfoque holístico e interdisciplinario para

comprender sus complejidades, utilizando marcos teóricos como la Teoría de Sistemas y la SDL. Por otro lado, en el comportamiento de co-creación de valor del estudiante, se enfatiza el papel activo de los estudiantes en la creación de conocimiento a través de interacciones sociales en entornos educativos, lo que resalta la importancia del contexto y la participación de los actores relevantes.

De forma específica, la metodología de esta investigación es una secuencia de tres fases. Comenzando con una exploración empírica del actual Comportamiento de Co-creación de Valor del Estudiante (CVC) en el contexto de la ES, aplicando una escala de Comportamiento de Co-creación de Valor del Cliente (CVCB) diseñada y recomendada por Tommasetti et al. (2017) para el ecosistema educativo. Luego, la identificación de la influencia del proceso, los arreglos institucionales y las relaciones desde la perspectiva de los actores involucrados (expertos y no expertos), y finalizando con la investigación cualitativa a través de sesiones de co-creación presenciales y virtuales en Living labs, hacia la construcción de un modelo de propuesta teórica específica de SVCB, considerando la complejidad ecosistémica. Cada fase de la investigación responde a una pregunta y objetivo de investigación específicos, de forma que entre las fases se alcanza el objetivo general de la investigación.

El proceso de investigación sigue una secuencia definida, comenzando con una exploración del Valor de Co-Creación Estudiantil (SVCB) existente utilizando el Valor de Co-Creación del Cliente (CVCB), principalmente empleando un enfoque cuantitativo. Esta fase inicial sirve como validación para evaluar la necesidad de nuevas propuestas adaptadas específicamente para los estudiantes. La segunda fase implica un examen exhaustivo de la co-creación de valor en el ecosistema de servicios de educación superior a través de entrevistas y métodos conversacionales, con el objetivo de obtener una comprensión más detallada y contextualizada. En la fase final, se formula directamente el modelo de propuesta SVCB en colaboración con actores del ecosistema, incluidos estudiantes y otros participantes. Se emplea una herramienta de "Living Lab", utilizando observación y registro narrativo para identificar y contextualizar la naturaleza auténtica del comportamiento estudiantil en iniciativas de co-creación. Esto no solo valida hallazgos previos, sino que también contribuye significativamente a la evolución de un modelo SVCB novedoso.

- La Fase I se centra en explorar el comportamiento actual de co-creación de valor estudiantil mediante un enfoque cuantitativo, utilizando una investigación transversal para evaluar el nivel de compromiso en la generación de valor durante las actividades académicas.
- La Fase II considera la complejidad del ecosistema de servicios de educación superior mediante una metodología de investigación cualitativa, utilizando entrevistas semiestructuradas como herramienta principal de recopilación de datos.
- La Fase III aborda las actividades cognitivas y conductuales del estudiante para co-crear valor, aplicando la metodología del Living Lab para desarrollar talleres de co-creación interactivos facilitados por un tercero neutral. Este taller permite la observación y el registro narrativo para identificar y contextualizar la verdadera naturaleza del tema a través de un análisis constructivo.

Resultados

En primer lugar, en la Fase I se realizó un Análisis Factorial de Componentes Principales (con rotación Varimax) de los 17 ítems de la escala de co-creación de valor de Tommasetti et al. (2017) para comprobar si, aplicados al ámbito de las IES y la participación de los estudiantes en el proceso de enseñanza-aprendizaje, se agrupan en las ocho dimensiones exactas. La fiabilidad de esta escala se evaluó mediante el alfa de Cronbach, cuyo valor alcanzó 0,904, es decir, por encima del nivel mínimo de 0,7 establecido por Nunnally (1978), y no fue necesario eliminar ninguno de los ítems sugeridos inicialmente. El resultado del Análisis Factorial Componencial permitió reducir los 17 ítems en tres dimensiones, que explican el 57,34% de su varianza (Tabla 16). El valor KMO es de 0,921, valor considerado muy bueno según Kaiser (1974).

La primera dimensión incluye los ítems pertenecientes a las dimensiones originales de la escala que miden "Búsqueda y recopilación de información", "Combinación de actividades complementarias" y "Cambios de hábitos", así como el ítem 12 perteneciente a la dimensión Coproducción (concretamente el ítem que mide el codiseño). Teniendo en cuenta esta agrupación de cosas, esta dimensión puede denominarse "aprendizaje proactivo",

ya que representa acciones en las que los alumnos buscan mejorar o sacar el máximo partido a su proceso de aprendizaje (Köpeczi-Bócz, 2020).

La segunda dimensión incluye los ítems pertenecientes a las dimensiones originales de la escala que miden el Coaprendizaje y la Conexión, y el segundo ítem perteneciente a la dimensión de Coproducción (es decir, el ítem que mide la coimpartición). Al agrupar estos ítems, esta segunda dimensión puede denominarse "relaciones con compañeros y profesores", ya que implican una interacción positiva con estas otras personas, tanto en el presente como en el futuro.

La tercera dimensión incluye los seis ítems pertenecientes a las dimensiones "Actividades cerebrales" y "Cooperación" de la escala de Tommasetti et al. (2017). Esta dimensión puede denominarse "actitud y comportamiento responsable", ya que se refiere a las acciones de los estudiantes que los llevan a realizar las actividades programadas y para un excelente proceso de enseñanza-aprendizaje. Se puede decir que incluye más medidas pasivas que las otras dos dimensiones.

En cuanto a la Fase II Los actores del ecosistma que participan, llega al siguiente resultado. Conocimiento Los estudiantes desempeñan un papel crucial en la integración del conocimiento y las experiencias en la propuesta de valor de la educación superior (ES). Existe un consenso en que la ES no solo debe centrarse en el conocimiento teórico, sino también en su aplicación práctica. La vocación, misión de las instituciones y las relaciones con otras entidades pueden influir en la integración del conocimiento y las experiencias. Los desafíos incluyen la participación de los estudiantes, la necesidad de una comunicación efectiva y la variabilidad en la forma en que las instituciones abordan la integración del conocimiento.

Equidad Los desafíos incluyen la falta de compromiso de los estudiantes, oportunidades variables entre instituciones y la necesidad de reevaluar las métricas académicas para reflejar la preparación del mundo real. Se destacan las barreras socioeconómicas para acceder a la ES, enfatizando la importancia de igualdad de oportunidades.

Interacción Las interacciones de calidad entre estudiantes e instituciones son cruciales para mejorar la experiencia educativa. Los estudiantes son vistos como participantes activos en la co-creación de valor, desafiando y enriqueciendo la educación. La comunicación, empatía y acceso igualitario son elementos esenciales de estas interacciones. La participación

activa de los estudiantes, la adaptación a nuevas técnicas pedagógicas y la igualdad de oportunidades son temas recurrentes.

Experiencia La co-creación de valor empodera a los estudiantes, aumentando la motivación, confianza y preparación para el trabajo. Se enfatiza la participación activa de los estudiantes y la inculcación de valores éticos y morales. La variabilidad en la implementación de la co-creación de valor entre instituciones destaca la necesidad de estandarización.

Personalización Las opiniones sobre la personalización varían, algunos ven limitaciones y otros abogan por la flexibilidad en la selección de cursos y enfoques. La importancia de la personalización varía según la institución y el programa, lo que indica la influencia de factores externos.

Relación La co-creación de valor puede plantear desafíos para los estudiantes, pero la colaboración entre instituciones y empleadores puede proporcionar experiencias valiosas. La calidad docente y el diseño de los entornos de aprendizaje influyen en la experiencia del estudiante. La estructura de las instituciones, la cultura local y la calidad del profesorado juegan un papel crucial en la co-creación de valor.

Finalmente la Fase III. Se llevó a cabo un taller de co-creación virtual y presencial con algunos actores del ecosistema, incluidos los estudiantes, para identificar las actividades cognitivas y conductuales necesarias durante las actividades académicas para co-crear valor.

Los resultados de los talleres de co-creación muestran que los participantes resaltaron sus logros académicos y habilidades clave como la creatividad y resolución de problemas, así como experiencias significativas en educación. Se propusieron actividades conductuales para los estudiantes universitarios, destacando la importancia de acciones contextualizadas y la colaboración en equipos.

En cuanto a las actividades cognitivas, se identificaron comportamientos cruciales como la participación en clase y procesos como la adaptabilidad, el pensamiento crítico y la creatividad. Además, los participantes definieron y contextualizaron actividades conductuales y cognitivas, ofreciendo ideas valiosas para la gestión efectiva del aprendizaje colaborativo en el entorno de la educación superior.

En la primera actividad, los participantes enfatizaron principalmente su grado académico y habilidades como la creatividad y resolución de problemas. En la segunda actividad, se propusieron actividades conductuales necesarias para los estudiantes

universitarios, destacando la gestión efectiva del tiempo y la comunicación clara. En la tercera actividad, se identificaron cuatro actividades cognitivas clave entre los estudiantes universitarios: participación en clase, adaptabilidad, pensamiento crítico y creatividad, consideradas esenciales para su éxito académico y personal.

La actividad 4 y 5 se centra en la definición de actividades conductuales y cognitivas por parte de los actores dentro del ecosistema de la educación superior (HE). Los participantes discuten sobre la implementación de acciones contextuales, trabajo en equipo, gestión del tiempo y comunicación clara.

En cuanto a las actividades conductuales, se reconoce la importancia de aplicar conocimientos prácticamente, trabajar en equipo, gestionar el tiempo y comunicarse de manera clara. Sin embargo, existen discrepancias en los énfasis específicos y las técnicas preferidas en diferentes contextos.

En cuanto a las actividades cognitivas, se destaca la participación activa, la adaptabilidad, el pensamiento crítico y la resolución creativa de problemas. Aunque hay consenso en la importancia de estas habilidades, existen diferencias en la forma en que se enfatizan y se priorizan, dependiendo del punto de vista de los participantes, que incluyen estudiantes, tutores, expertos en educación científica, agencias de acreditación, gobiernos locales y organizaciones sin fines de lucro.

En las sesiones de co-creación presenciales, se obtuvieron resultados significativos a través de cinco actividades. La primera actividad, denominada "Cronograma de Empatía", permitió a los participantes discutir y considerar los desafíos del sistema de Educación Superior (ES) en México desde diferentes perspectivas. Los principales problemas identificados incluyeron la falta de experiencia laboral entre los recién graduados, desafíos emocionales no abordados adecuadamente en el aula y deficiencias en habilidades de comunicación.

La segunda actividad, "Periódico del Futuro", alentó a los participantes a imaginar titulares de noticias relacionados con la ES en México para el año 2030. Se destacaron la mejora de la calidad educativa, logros destacados de estudiantes y altas tasas de empleo especializado. Este ejercicio fomentó discusiones sobre estrategias para alcanzar estos objetivos.

La tercera actividad, "Lienzo de Estrategias Sensoriales", facilitó la discusión sobre estrategias para mejorar el rendimiento académico de los estudiantes. Se propusieron medidas como la formación continua del personal, mejoras en infraestructura, evaluaciones integrales de desempeño y programas de apoyo emocional.

En la cuarta actividad, "Semáforo", se validaron las estrategias identificadas anteriormente según su viabilidad de implementación por parte de los estudiantes. Se clasificaron en verde (factibles), amarillo (parcialmente controlables) y rojo (fuera de control). Esto ayudó a priorizar las acciones.

Finalmente, en la actividad de cierre, "Buzón de Retroalimentación", se generaron comentarios sobre las estrategias propuestas y validadas. Se destacó la necesidad de transformar los planes de estudio, fortalecer la relación entre las ES y la industria, y cuestionar la efectividad de ciertas evaluaciones integrales. En resumen, estas sesiones de co-creación proporcionaron una plataforma para identificar desafíos y estrategias clave para mejorar la ES en México, involucrando a diversos actores y promoviendo el diálogo constructivo.

Conclusiones

En cuanto a la Fase I de la investigación, el estudio analiza cómo los estudiantes co-crean valor en un contexto específico de la educación superior (HE) en México, identificando su participación como actores del ecosistema. Se encontró que el 52.2% de los estudiantes muestran un comportamiento óptimo de co-creación durante las actividades académicas, mientras que el 29.8% muestran un comportamiento medio, y el 18% muestra una baja disposición para ser actores co-creativos. Estos resultados resaltan la importancia de la participación estudiantil en el proceso de co-creación de valor en la educación superior, especialmente en el contexto de las universidades públicas en México.

Se señala que algunos estudiantes muestran disposición para actividades proactivas, pero no para el trabajo colaborativo con sus compañeros y profesores. Esto sugiere que la relación entre estudiantes y profesores puede influir en el nivel de co-creación. Además, se destaca que la aprobación de los cursos es alta a pesar de la baja disposición para la co-creación, lo que indica una posible discrepancia entre la calidad educativa percibida y la participación real de los estudiantes.

Se enfatiza que estos hallazgos no son exclusivos de un perfil profesional o nivel educativo específico, y se recomienda realizar mediciones similares en diferentes entornos y escenarios. Además, se sugiere identificar perfiles sociodemográficos, psicográficos y actitudinales de los estudiantes con diferentes niveles de compromiso con la co-creación.

Se concluye que aunque los estudiantes obtengan calificaciones satisfactorias, no garantiza su participación real como co-creadores de valor. Esto plantea desafíos para las instituciones de educación superior en América Latina (LATAM), donde la gestión universitaria está influenciada por la tendencia de la marketización. Se destaca la necesidad de integrar avances en ciencias del servicio para gestionar las instituciones de educación superior y mejorar la participación estudiantil en el proceso de co-creación de valor.

Con relación a la Fase II se aborda la dinámica de la co-creación de valor en el ecosistema de servicios en la educación superior (HE, por sus siglas en inglés), con un enfoque en los procesos, arreglos institucionales y relaciones que influyen en esta dinámica. Se guía por la pregunta SQ2 sobre la influencia de estos elementos en la co-creación de valor en el ecosistema de servicios de HE. La metodología de investigación cualitativa se basa en entrevistas semi-estructuradas, utilizando el modelo de co-creación de valor en HE formulado por Dollinger et al. (2018), que abarca dos constructos de segundo orden: Co-producción (compuesto por Conocimiento, Equidad e Interacción) y Valor-en-Uso (compuesto por Experiencia, Personalización y Relación).

En cuanto a la co-producción, se resalta la naturaleza compleja de la integración del conocimiento y se subraya el papel crucial de los estudiantes en incorporar activamente conocimientos y experiencias en la propuesta de valor de HE. Se enfatiza la colaboración entre estudiantes, profesores e institución como fundamental para enriquecer la propuesta de valor. La equidad se destaca, haciendo hincapié en la necesidad de igualdad de oportunidades y la participación de los estudiantes. La calidad de las interacciones, donde los estudiantes son vistos como contribuyentes activos a la co-creación de valor, se identifica como un elemento esencial.

En el ámbito del valor-en-uso, la co-creación de valor impacta significativamente las experiencias educativas, motivando y capacitando a los estudiantes al involucrarlos activamente en la creación de conocimiento. Se destaca la importancia de la colaboración entre instituciones educativas y empleadores para entender las demandas del mercado

laboral. Se consideran factores críticos como la calidad de la enseñanza, el diseño del entorno de aprendizaje y la relación entre profesores y estudiantes, con una variabilidad observada que enfatiza la necesidad de estandarización.

En cuanto a la Fase III. Se destaca la importancia de actividades cognitivas como la adaptabilidad, el pensamiento crítico y la creatividad, así como habilidades conductuales como la comunicación efectiva, el trabajo en equipo y la gestión del tiempo para el éxito académico y personal de los estudiantes. La participación de diversos roles en el ecosistema enriqueció la comprensión de las expectativas específicas de cada actor.

Se mencionan actividades como la "Línea de tiempo de empatía" y el "Periódico del Futuro", que proporcionaron información valiosa sobre desafíos y mejoras potenciales en el ecosistema de servicios de educación superior. Se identificaron estrategias para mejorar el rendimiento académico de los estudiantes, y se discutieron propuestas para transformar los planes de estudio y fortalecer la relación entre las instituciones de educación superior y la industria. Se resalta la importancia de ciertas habilidades y actitudes para la participación estudiantil en la co-creación de valor, así como la diversidad de perspectivas que pueden mejorar significativamente los entornos de aprendizaje colaborativo en el ecosistema educativo.

Finalmente se propone un modelo de Comportamiento de Cocreación del Estudiante Universitario, con base en la Lógica-dominante de servicio, considerando la dinámica y complejidad del ecosistema educativo, mediante tres fases: identificación de un modelo de co-creación centrado en el cliente, análisis de la influencia de procesos e instituciones en la co-creación de valor, e integración del conocimiento y experiencia de los participantes mediante talleres de co-creación. El modelo propuesto considera actividades cognitivas y conductuales en el contexto educativo, reconoce la complejidad del entorno educativo y se basa en el conocimiento experiencial de los participantes.

Se emplea la triangulación de matrices y la categorización de resultados para la elaboración del modelo propuesto, lo que aumenta la validez y fiabilidad de los resultados. El modelo propuesto consta de seis categorías que podrían componer el Comportamiento de Co-Creación de Valor Estudiantil (SVCB), por sus siglas en inglés, en el ecosistema de servicios de educación superior, tres relacionadas con actividades conductuales y tres con actividades cognitivas.

El modelo propuesto integra elementos relacionados con el comportamiento y la cognición de los estudiantes, así como la complejidad del ecosistema educativo. En cuanto al comportamiento y la cognición, se destacan actividades como el aprendizaje colaborativo, la aplicación del conocimiento, la gestión del tiempo, la comunicación clara, la responsabilidad, la innovación, la creatividad, entre otros. Estos elementos muestran cómo los estudiantes participan activamente en su aprendizaje, aplican conocimientos prácticos, toman decisiones informadas y desarrollan habilidades cognitivas como el pensamiento crítico y la reflexión.

Por otro lado, en relación con la complejidad del ecosistema educativo, se identifican factores como la presencia de múltiples actores, variedad de instituciones educativas, cambios rápidos en el mercado laboral y la influencia de factores económicos, políticos y culturales. Se destaca la importancia de la colaboración entre instituciones y actores, así como la necesidad de adaptar los programas educativos a las demandas cambiantes del mercado laboral y abordar las barreras socioeconómicas que afectan el acceso a la educación superior.

La investigación realizada sobre la dinámica del SVCB en un contexto específico de la educación superior mexicana revela conclusiones significativas que abarcan diversas dimensiones de las actividades académicas y la gestión institucional. Desde implicaciones teóricas hasta prácticas, los hallazgos ponen de manifiesto la complejidad del compromiso estudiantil y la necesidad de comprender las diferentes etapas del proceso de co-creación de valor en el contexto educativo.

En términos teóricos, se identifican tres segmentos de estudiantes con niveles diferenciados de co-creación, lo que evidencia la influencia de la mercantilización en la evaluación estudiantil y la desconexión entre las calificaciones numéricas y el compromiso real del estudiante. Además, se señala la necesidad de integrar avances en ciencias del servicio y marketing en la gestión de las instituciones educativas para superar las limitaciones de enfoques tradicionales centrados en el estudiante como cliente y el profesor como proveedor.

En relación con las implicaciones prácticas, se destaca la discrepancia entre la tasa de aprobación del 100% y el comportamiento de co-creación de valor, lo que suscita dudas sobre la confiabilidad de los sistemas de calificación y la desconexión entre el éxito académico y la participación real en la co-creación de valor. Se enfatiza la importancia de la colaboración

entre estudiantes, facultades e instituciones, así como la necesidad de abordar desafíos prácticos como la participación estudiantil y la comunicación efectiva.

Además, el estudio subraya la importancia de habilidades cognitivas y comportamentales para el éxito académico y personal de los estudiantes, así como la necesidad de un enfoque equitativo y colaborativo en la educación superior. Se aboga por estrategias que fomenten la adaptabilidad, el pensamiento crítico y la creatividad, así como la colaboración entre instituciones educativas y empleadores para alinear la educación con las demandas del mercado laboral.

A pesar de las limitaciones en términos de generalización y seguimiento a largo plazo, esta investigación ofrece una base sólida para futuras investigaciones que aborden la dinámica de co-creación de valor en diferentes contextos culturales y geográficos. En resumen, aborda la complejidad de la educación superior en un entorno cambiante, resaltando la necesidad de enfoques innovadores y colaborativos para mejorar la calidad y la equidad en la co-creación de valor.

CHAPTER I
INTRODUCTION

Chapter I: Introduction

Higher Education (HE) has long been recognized as a fundamental pillar for the social and economic development of nations. In an increasingly complex and globalized world, the formation of skilled and critical citizens is essential to meet the current challenges. Hence, HE not only provides specific knowledge and skills but also plays a crucial role in the formation of individuals capable of contributing to the progress and well-being of society as a whole (Gao et al., 2019; Krstić et al., 2020; Sanchez-Carrillo et al., 2021).

However, in recent decades, HE has undergone a significant transformation due to the growing influence of market logic in its operation. In this sense, the increasing "marketization" led to several challenges and concerns regarding its social value and original purpose (Judson and Taylor, 2014; Schelble, 2006). In a competitive market context, public and private Higher Education Institutions (HEIs) are often pressured to adopt business practices and generic marketing strategies to attract and retain students. This can lead to a more commercial and utilitarian view of education, where students are perceived as customers and education becomes a product (Díaz-Méndez and Gummesson, 2012; Elsharnouby, 2015; Seeman and O'Hara, 2006).

To the detriment of a more holistic approach that embraces the integral development of the individual and their capacity to contribute to the common good, theories and approaches have emerged that consider the HE particularities, enhancing its study and understanding of its nature, that is the case of the Service-dominant Logic (SDL), Value Co-creation and service ecosystem, proposed by Vargo et al. (2008) and Vargo and Lusch (2016, 2017). These approaches have appointed valuable conceptual frameworks.

Firstly, the service ecosystem approach has been highly related to HE worldwide (Nie et al., 2019; Vargo et al., 2015), as a concept taken from biology to better understand the interactions between actors (living components) and factors (non-living components) as members of a whole, generating an active interaction and cooperation. These ecosystems have been defined by Vargo and Lusch (2014, p.24) as a "relatively autonomous and self-adjusting system of resource-integrating agents connected by shared institutional arrangements and mutual value creation through the exchange of service". The above concept emphasizes the dynamism of the service and the active participation of all its actors and

institutional arrangements, generating value for themselves and others and their contribution to the functioning and sustainability of the ecosystem.

From the SDL perspective, education is not merely a transaction between the provider and customer, but rather an active collaboration in which the student plays a central role (Díaz-Méndez and Gummesson, 2012; Gu and Wang, 2022). The HE service ecosystem consists of multiple actors, including students, faculty, administrators, and employers, who interact to jointly create value during educational service. In this sense, the co-creation of value as a premise of the SDL takes on relevance, because it considers engaging students as key actors in the creation of value (Vargo et al., 2015).

Addressing the value co-creation approach is thus a promising perspective to actively involve students in their learning process, making them co-creators of their educational experience (Thomas and Ambrosini, 2021). The idea that students are not mere receivers of knowledge, but actors who construct their knowledge, represents a significant change in how marketing experts traditionally conceive education (Bovill, 2020).

However, the notion of HE value co-creation also raises important issues, especially in terms of separating the customer value co-creation behavior (CVCB) from the student. Although there are similarities between the dynamics of service in the commercial and educational domains (Hemsley-Brown and Oplatka, 2006), it is also crucial to recognize the differences and particularities of the latter, to avoid reducing education to a mere commercial transaction, focused only on short-term satisfaction and immediate expectations, and polluting the intrinsic social value of education (Díaz-Méndez et al., 2019).

Student participation in the generation of value during their HE professional training and service experience implies that students should participate in specialized and high-level commitment activities and efforts that enrich their education (Dollinger et al., 2018). To study and better understand the role of the student as a co-creator of value during academic activities, the framework of Student Value Cocreation Behavior (SVCB) may be considered, hitherto, it has been mostly adapted from the customer behavior (Botti et al., 2017; Tommasetti et al., 2015, 2017).

Based on the foregoing, to develop an SVCB conceptual model from the SDL perspective and ecosystem theory, this research integrates three interrelated phases. In the first stage, a detailed exploration of current SVCB in a specific HE ecosystem was conducted.

To this end, the customer value co-creation behavior scale developed by Tommasetti et al. (2017) was adapted to assess its applicability in the context of higher educational service. This adaptation was carried out to verify the need to build a new scale that does not consider the student as a customer in a highly marketized service ecosystem.

The second phase of the research focuses on identifying the intrinsic complexity of the HE service ecosystem. To achieve this, the influence of processes, institutional arrangements, and relationships on the co-creation of value in this area is analyzed. The exploration is directed towards the perspective of the various actors involved in the implementation and operationalization of co-responsibility and value in use, to understand the complexity of this ecosystem.

Once the complexity of the educational environment is considered, the third and final phase focuses on determining the cognitive and behavioral activities of students that shape the proposed conceptual model of Student Value Co-creation Behavior. This objective is achieved by integrating the knowledge and experience of actors involved in academic and management activities. Data collection is carried out through in-depth interviews and co-creation workshops with all participants of the ecosystem, including students, and the analysis of the results is performed using ATLAS. ti 9, for the triangulation of aprioristic and emergent categories for the generation of the model proposal.

1.1 The phenomenon of study and the research objectives

1.1.1 Definition of the phenomenon of study

The scientific phenomenon: Higher Education students value co-creation behavior, considering the service ecosystem complexity.

1.1.2 General objective

To develop a conceptual model of Higher Education Student Value Co-creation Behavior from the perspective of Service-dominant Logic theory and service ecosystem approach, integrating the behavioral and cognitive activities required during academic interaction, to contribute to maintaining the social value of Higher Education.

1.1.3 Specific objectives

- SO1.To explore the current student value co-creation behavior in a specific HE ecosystem by adapting the Tommasetti et al. (2017) value concretion customer behavior scale to verify the applicability in the Higher Education service ecosystem.
- SQ2.To identify the influence of the process, institutional arrangements, and relationships over Higher Education cocreating value, through exploring involved the perspective of the actors on the implementation and operationalization of co-responsibility and value in the use, to consider the ecosystem dynamic.

  SO3. To integrate the knowledge and experience of the actors involved in academic and management activities, through in-depth interviews and co-creation workshops with all the ecosystem actors, including the students, to identify the cognitive and behavioral activities needed and expected during academic activities to co-create value in a complex ecosystem.

1.1.4 General Research Questions

What are the expected behavioral and cognitive activities during academic interaction that integrate the student value co-creation behavior conceptual model in the complex Higher Education service ecosystem?

1.1.5 Specific Research Questions

- SQ1. What is the current value co-creation behavior of the students during interaction in academic activities in the Higher Education service ecosystem?
- SQ2. How do processes, institutional arrangements, and relationships influence the co-creation of value in the Higher Education service ecosystem?
- SQ3. What cognitive and behavioral activities do service ecosystem actors consider of the Higher Education value co-creation student participation as a co-creator?

1.2 Theoretical proposition

The expected value in HE falls on the students and is reflected in the development of human skills, the appropriation of disciplinary knowledge, the development of professional

competencies, and the improvement of their working lives. For these reasons, their co-creative behavior implies deep and specialized participation during academic activities.

Therefore, considering the ecosystem complexity, a theoretical SVCB model in the HE service ecosystem is proposed, which considers the necessary level of interaction, commitment, and personal effort of the cognitive activities of the students (co-production, value in use, commitment, self-learning, and critical thinking), thus allowing the development of human skills and professional-disciplinary competencies (medium and long term objectives) and not only student satisfaction as an element of recruitment, retention, and graduation.

1.2.1 General Theoretical Proposition

GTP. Theoretical Model for SVCB: The focus is on creating a distinct theoretical model that places the onus of value creation on students. This involves not only academic aspects but also extends to the improvement of their working life and contributing to social and sustainable development in their environment.

1.2.2 Specific Theoretical Proposition

- STP1: Co-Creation through Personal Transformation: The emphasis is on the active involvement of students in the co-creation process, leading to a significant personal transformation. This transformation is expected to have lasting impacts, indicating a shift in focus from immediate gains to long-term benefits.
- STP2: Specialized Student Participation in Co-Creation: Students are expected to actively engage in co-creation by taking on various roles such as co-creators, co-designers, and co-producers. The emphasis on self-taught and critical thinking highlights the importance of independent learning and the application of knowledge within the specific professional context of their discipline.

1.3 Motivation/opportunity of the research

Since 2004, when the SDL approach arrived on the international scene, researchers and academics began to delve deeper into one of the main premises on which the service-based value exchange approach revolves: integrating the value co-creation, understood as the joint

achievement of objectives within the economic activity (Vargo et al., 2008). This co-creation of value implies certain behaviors and activities on the part of all the actors involved in achieving common objectives (Volkmann et al., 2021).

The SDL approach has been largely applied to the HE service ecosystem (Autioz and Thomas, 2018; Gao et al., 2019; Díaz-Méndez et al., 2017; Kumari et al., 2020). However, in an attempt to understand the co-creation behavior of the student, different approaches and general models developed for the service customer have been implemented. This practice is named by various authors as HE marketization. It advocates a standardization of management in the different service ecosystems. This standardization does not necessarily improve service functioning, on the contrary, it may be a pollutant of the ecosystem as some authors advocate (Díaz-Méndez et al., 2017; Díaz-Méndez and Gummesson, 2012; Judson and Taylor, 2014; Schelble, 2006).

Hitherto, there has been no specific SVCB model founded in the literature focused on safeguarding the HE social value and its reason for being within social human development, no models have been developed to understand SVCB specifically, and differently from customer behavior. This represents a research opportunity to develop a theoretical model specifically for students that differs from that of customers, integrating the behavioral and cognitive activities of the students necessary during the learning experience and considering HE service ecosystem complexity to avoid contaminating the service with generic practices that may be efficient in other ecosystems, but whose implementation in HE could pose a polluting threat.

1.4 Structure of the work

The structure of the thesis is composed of VII interrelated chapters that follow a sequential logic to address the research objectives. Chapter I introduces the research direction, beginning with an introduction that sets the stage for exploring the study phenomenon, offering a broader context to underscore the relevance of the topic. The definition of the study phenomenon follows, specifying the boundaries and extent considered in the research. Clear research objectives are outlined, delineating the specific goals. Additionally, research questions are posed to guide exploration and analysis. The theoretical proposition establishes

the conceptual framework, providing a robust foundation for understanding the phenomenon. The chapter concludes by addressing the motivations and opportunities driving the research, emphasizing the significance of the topic and the anticipated practical or theoretical relevance of the results.

Chapter II, "Literature Review", provides an exhaustive analysis of previous relevant studies to contextualize the study. This chapter includes the "Theoretical Framework", where the fundamental theories that support the work are presented, the "Referential Framework" which connects the key concepts, and the "Contextual Framework" which explains the research context. Chapter III, "Methodological Foundations," establishes the methodological framework of the study, delving into key elements such as the overall research strategy and the specifics of the research design. This chapter describes the data collection and analysis processes.

Chapters IV, V, and VI present the results of the empirical research conducted. Moving on to chapter IV, "Exploring the Current Value Co-creation Behavior of the Students (Phase I)", the initial research question is addressed using a quantitative and descriptive approach. A specialized scale is employed to gauge value co-creation behavior in academic activities, providing a detailed examination of each scale dimension to enhance understanding of student behavior. Subsequent chapters, V and VI, respectively deal with the second and third research questions through qualitative methodologies such as semi-structured interviews and Living lab methodology with co-creation workshops. These chapters explore the complexity of the HE service ecosystem and determine the cognitive and behavioral activities of students as co-creators of value. Finally, chapter VII presents the main conclusions and implications of the research.

CHAPTER II

Literature Review

Chapter II: Literature Review

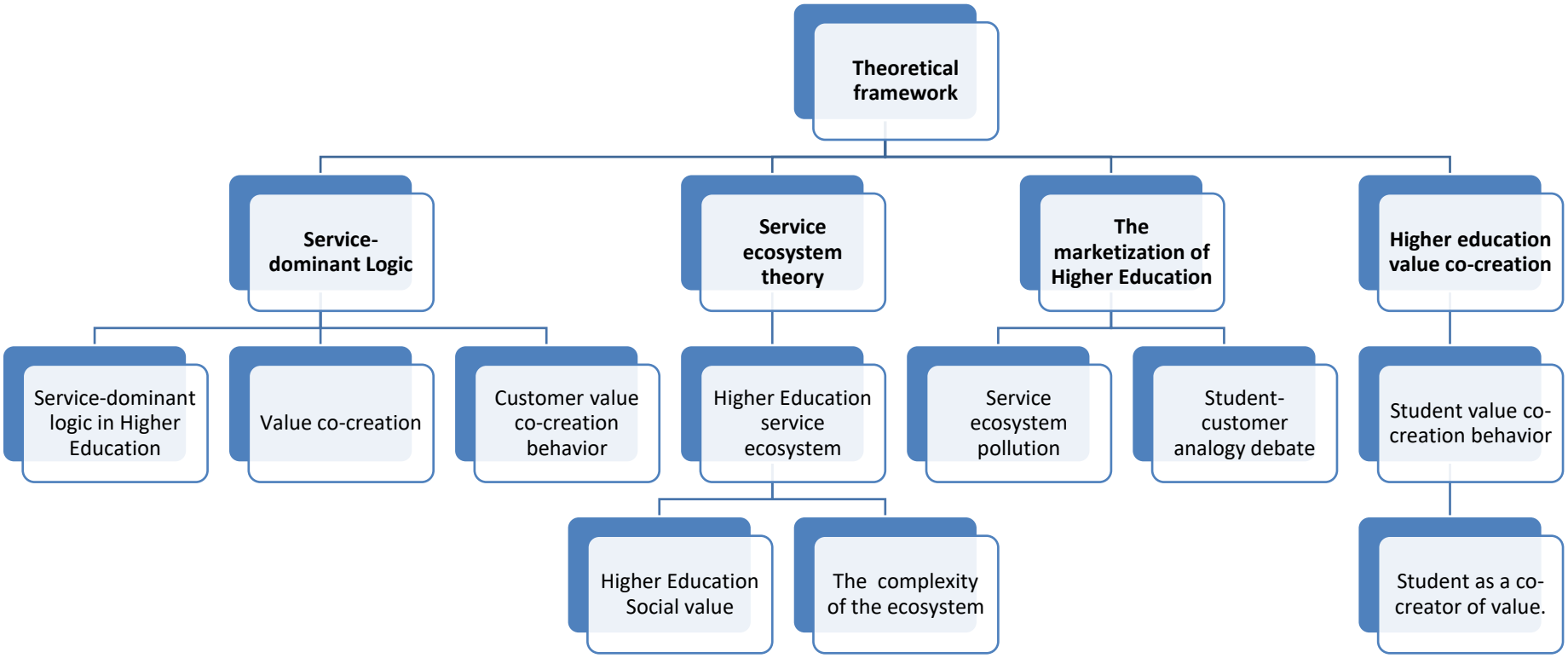
2.1 Theoretical Framework

This chapter shows the different concepts, theories, and approaches that serve as the theoretical basis for this investigation. The main theoretical framework is called Service-dominant Logic (SDL) and is specifically relevant to the Higher Education (HE) service ecosystem, due to its emphasis on the marketization of this ecosystem using the student as an analogy for the customer. This scenario addresses how the behavior of the students in co-creation differs from the customers.

First, the theoretical foundations of the Service-dominant Logic and the co-creation of value are incorporated, highlighting the latter as one of its fundamental premises. Likewise, the Service Ecosystem Theory is examined and the marketization of HE is considered as a contaminating factor within this ecosystem. Then, to understand the HE dynamics and its complexity, the service ecosystem approach is described, the complexity of this ecosystem is influenced by several factors, including its social value, the different actors involved, and the role of the student as a co-creator of value.

Finally, the section presents the theoretical framework of Student Value Co-creation Behavior (SVCB), including their participation during personalized educational experiences, co-producing and being co-responsible for knowledge generation, and actively engaging and taking responsibility for their academic development. Specifically, cognitive activities focus on acquiring knowledge and skills, and behavioral activities focus on developing competencies and attitudes, which are addressed and integrated. The next theoretical framework addressed in this paragraph shows the relevance of the theoretical bases for understanding the SBCV. These concepts provide a solid basis for analyzing the complexity of the educational service ecosystem, considering the fundamental HE social value, to avoid marketization. The theoretical hierarchy of presentation of theories, concepts, and approaches can be visualized in Figure 1.

Figure 1.
Theoretical framework structure.



Source: Own elaboration

2.1.1 Service-dominant Logic

The SDL is a perspective on marketing that focuses on the importance of service in marketing and considers service to be the primary source of value in an exchange relationship between a customer and a firm (Vargo and Lusch, 2014). It views service as the dominant form of value creation and delivery and considers goods to be merely supporting elements. In SDL, the exchange relationship between a customer and a firm is seen as a co-creation of value, where the customer is an active participant in the process of value creation. The involvement and interaction with the customers contribute provider to the service experience and the overall value of the exchange (Grönroos and Gummerus, 2014; Jaakkola et al., 2015).

The SDL approach differs from the traditional Goods-dominant logic (GDL) perspective, which views goods as the primary source of value and service as supplementary to the product (Michel et al., 2008; Vargo and Lusch, 2014), recognizing that in many cases, service are more important to customers than the physical goods themselves and that the service experience is a key factor in building customer loyalty and satisfaction (Lusch et al., 2007). For the above, SDL provides a more comprehensive and customer-centric perspective on marketing, recognizing the importance of service and the co-creation of value in exchange relationships (Grönroos, 2006; Vargo and Lusch, 2014, 2017).

2.1.1.1 Service-dominant Logic in Higher Education

The SDL approach is a customer-focused perspective that views all economic exchanges as service exchanges, it has been applied in various industries, such as lodging service (Farrukh and Ansari, 2021; Liu and Jo, 2020; Solakis et al., 2022) for owners of personal care businesses (Cossío-Silva et al., 2016; Vega-Vazquez et al., 2013), the provision of public service (Ida, 2017; Luu et al., 2018), grocery stores (Shamim et al., 2016), the telecommunications industry (Delpechitre et al., 2018), healthcare facilities (Samsa and Yüce, 2022) and of course, including the HE service ecosystem (Encinas and Cavazos, 2016; Foroudi et al., 2018; Moreno and Calderón, 2017), to understand the relationships and interaction between universities and their actors (students, faculty, employers, government, etc.) (Christopoulos et al., 2012; Díaz-Méndez et al., 2019). The SDL lexicon highlights the co-creation of value between universities and their actors in the HE service ecosystem,

recommending that universities build their service and programs jointly with all of them to better understand their requirements and expectations (Thomas and Ambrosini, 2021). This approach may help universities create educational experiences that are relevant, meaningful, and valuable for the beneficiaries (Carrillo et al., 2019).

For example, in the SDL approach, students are viewed as co-creators of value rather than simply passive recipients of education (Cassidy et al., 2021; Guilbault, 2016). This means that universities should involve students in the design of their courses and programs to ensure that they meet their needs and expectations. Additionally, this approach encourages universities to build partnerships with employers to ensure that their programs prepare students for the workforce and meet the needs of industry (Anderson and Sanga, 2019).

In this sense, the SDL may support universities to co-create more value for their actors, including students, by fostering collaboration, co-creation, and relevance. By taking an SDL perspective, universities should better understand the needs of their students and design service and programs that meet their needs and expectations instead of "offering value" (Boyer et al., 2014; Guilbault, 2016).

2.1.1.2 The static and dynamic perspective of the Higher Education

The traditional approach to HE, known as the static perspective, places a strong emphasis on memory, standardized testing, and rote learning. Instead of promoting critical thinking and active learning, this viewpoint emphasizes the transfer of knowledge from a lecturer to a passive audience of pupils (Rostron, 2009).

In medieval institutions of Europa, when students were required to remember and recite facts from textbooks without questioning the content, the static perspective first appeared (Cobban, 2017). From the static perspective, education is viewed as a one-way process, with the teacher as the sole source of knowledge and the student as a passive receiver. This approach to HE has been criticized for its failure to prepare students for the complex challenges of the modern world (Sharp et al., 2017). Instead, of emphasizing real-world application and problem-solving, the static perspective frequently places more emphasis on theory and abstraction. Because of this, graduates might not have the knowledge and expertise necessary to succeed in the workplace or make significant contributions to society (Prawat, 1992; Winstone and Carless, 2019).

The dynamic perspective of HE, in contrast, describes the constantly evolving post-secondary education landscape that is influenced by technological advances, shifting societal needs, and international economic factors (Bathmaker, 2017). The requirement for institutions to be able to foresee and respond to changes in the labor market, the economy, and society is one of the main elements of the dynamic HE viewpoint. This calls for dedication to continual research and development as well as a readiness to be adaptable and responsive to changing needs and possibilities (Chatterton and Goddard, 2003; Hillman and Orians, 2013).

The dynamic viewpoint of HE places a strong focus on interdisciplinary learning and collaboration, which is another crucial feature. Institutions need to give students opportunities to develop knowledge and skills applicable to a variety of fields and industries as traditional academic disciplines become more intertwined. To thrive in the dynamic, HE landscape, institutions must also be able to adopt new technologies and teaching methods. Using data analytics and other tools to enhance student outcomes and institutional performance is part of this. It also includes the use of online and hybrid learning (Castro, 2019; Yarime et al., 2012).

Ultimately, the dynamic perspective of HE is about being able to anticipate and respond to change and create innovative solutions that address the needs of students, employers, and society. It requires a commitment to continuous learning and improvement, and a willingness to embrace new ideas and approaches (Moscardini et al., 2022).

2.1.1.3 Value Co-creation

The emergence of the SDL has revolutionized the way organizations perceive value creation, traditional economic theories primarily focused on the perspective of the producers, treating value because of the production process (Grönroos and Gummerus, 2014). However, the SDL challenges this notion by emphasizing the active involvement of customers in value creation (Grönroos, 2011). At its core, value co-creation acknowledges that customers are not merely passive recipients but active participants in the value-creation process. This theoretical-conceptual framework aims to explore the significance of value co-creation within the dominant service logic paradigm, drawing upon relevant quotes and references to support its premises (Grönroos, 2006; Jaakkola et al., 2015).

On the one hand, Vargo and Lusch, (2014) mentioned that value is not created by firms but is always uniquely and phenomenological determined by customers, who will co-create value with firms quote encapsulates the essence of value co-creation within the dominant service logic. It highlights that customers play a pivotal role in defining value and emphasizes the importance of collaboration between firms and customers in the value-creation process (Perks et al., 2012).

On the other hand, Prahalad and Ramaswamy (2004), also reaffirm the essence mentioning that value co-creation involves firms and customers engaging in an interactive process to jointly create value outcomes that benefit all parties, emphasizing the interactive nature of value co-creation, suggesting that both firms and customers actively participate in the process. This quote underscores the mutual benefits derived from collaborative efforts and the shared responsibility for value creation.

In addition to the above, Grönroos and Voima (2013), mentioned SDL recognizes that value is co-created in complex, collaborative networks involving multiple actors, highlighting the broader perspective of value co-creation within the dominant service logic. It acknowledges that value creation is not limited to the firm customer but extends to a network of actors. This quote emphasizes the importance of considering the wider ecosystem in which value is co-created.

Following the above, Vargo and Lusch (2017) exposed that in SDL, value is determined through interactions, experiences, and relationships, leading to the development of customized and personalized offerings, emphasizing the shift in focus from tangible products to intangible interactions, experiences, and relationships. It underscores the significance of understanding and responding to individual customer needs and preferences, thereby creating value that is customized and personalized.

Finally, Purcell et al. (2019) describe that value co-creation enables firms to gain a competitive advantage by leveraging the knowledge, skills, and resources of their customers, highlighting the strategic importance of value co-creation. By involving customers in the value-creation process, firms can tap into the collective knowledge, skills, and resources possessed by customers. This collaborative advantage enables firms to differentiate themselves from competitors and enhance their overall competitiveness.

In conclusion, this theoretical-conceptual framework has shed light on the premise of value co-creation within the SDL. The quotes and references presented in this framework underscore the significance of active customer involvement, collaborative networks, personalized offerings, and strategic advantage. By embracing the concept of value co-creation, organizations can harness the full potential of their customers and create value propositions that align with the dynamic needs and preferences of the market (Grönroos, 2006; Lusch and Nambisan, 2015; Tommasetti et al. 2017).

2.1.1.4 Customer Value Co-creation Behavior

Continuing into the SDL lexicon, the concept of Customer Value Co-creation Behavior (CVCB) has gained significant attention, exploring the theoretical and conceptual aspects of value co-creation behavior and its implications as a fundamental SDL premise in a specific service ecosystem. The new SDL paradigm over the exchange has involved the customer in an active way to customers, emphasizing the importance of collaborative interactions and engagement, hence, VCB becomes a central element in this new logic, challenging the conventional notions of service provision (Tommasetti et al. 2017; Yi and Gong, 2013).

Initial research identifies two types of customer value co-creation behavior: required (in-role) behavior necessary for successful value co-creation, and voluntary (out-of-role) behavior that provides extraordinary value to the firm but is not necessarily necessary for value co-creation jointly between providers and customers (Bove et al. 2009; Yi and Gong, 2013).

The behaviors, interactions, and engagements of both service providers and customers in collaboratively producing value inside a service ecosystem are referred to as value co-creation behavior. It entails the exchange of resources, skills, knowledge, and experiences to improve the value proposition. Value co-creation behavior allows for the customization and personalization of service by involving customers as active participants, promoting a stronger sense of satisfaction and loyalty (Alexander and Jaakkola, 2015).

It is possible to say that CVCB fundamentally challenges the notion of value as a fixed, predefined entity, instead, it recognizes the subjective and context-specific nature of value, considering that customers play a crucial role in defining value based on their individual needs, preferences, and experiences (Grönroos et al., 2015), therefore service

providers, in turn, adapt their offerings to meet these dynamic customer demands. This leads to the emergence of personalized and tailored service experiences, fostering long-term relationships and customer loyalty (Shulga and Busser, 2021).

Then, the core of the SDL is CVCB, which marks a considerable divergence from conventional exchange-based approaches. This approach underlines the transformative power of collaboration and engagement in current service ecosystems by acknowledging the active participation of customers in value generation. Understanding and utilizing CVCB will be crucial for the theoretical basis looking to succeed in this new paradigm of service provision as the service landscape continues to change, being a very changing field of the behavior and service sciences (Shulga et al. 2021).

2.1.2 Service Ecosystem Theory

The "service ecosystem perspective" refers to the understanding and analysis of the interrelated and interdependent elements that make up a service ecosystem. A service ecosystem can be seen as a complex network of entities, including customers, suppliers, partners, competitors, regulations, and technological advancements, among others, that interact and influence one another to create value for the end customers (Autio and Thomas, 2018; Lusch and Vargo, 2014).

Considering the point of view of the service ecosystem, it is extremely important to consider the internal workings of individual organizations and the external factors that affect the overall customer experience. This means considering the interactions between different actors, the impact of technology and digital transformation, and the role rules and standards play (Grönroos, 2006; Sklyar et al. 2019).

From the viewpoint of a service ecosystem, organizations can enhance their comprehension of the elements influencing customer behavior and satisfaction. Utilizing this insight, they can make informed strategic decisions to elevate customer service and enhance the overall customer experience. Furthermore, through collaboration with other actors within the service ecosystem, organizations have the potential to foster innovation, discover new opportunities, and attain a more significant competitive advantage (Bolton et al. 2014; Vargo, 2009).

2.1.2.1 Higher Education service ecosystem

In HE the service ecosystem approach refers to a holistic, interdisciplinary perspective that recognizes the complex and interconnected nature of service in the HE sector. This approach acknowledges that service in HE are not isolated or standalone but are part of a larger network of interactions and dependencies among students, faculty, staff, administrators, institutions, and the wider community (Nie et al. 2019; Richter et al. 2015).

Adopting HE a service ecosystem approach involves considering the different components and actors in the service environment and recognizing the interplay among these components in creating value for students, faculty, and the institution. For example, the quality of student service, such as advising and career service, may have a direct impact on student retention and satisfaction, which in turn can affect the reputation of the institutions and overall success (Díaz-Méndez et al. 2017; Koskela-Huotari and Vargo, 2016).

In this approach, HEIs are seen as dynamic systems where service, processes, and technologies are integrated to create a holistic and seamless experience for students. The goal is to create a service ecosystem that is efficient, effective, and responsive to the needs and expectations of students, faculty, and the broader community, through the collaborative and strategic approach and involving multiple departments and actors (Autio and Thomas, 2018; Koskela-Huotari and Vargo, 2016).

The HE service ecosystem refers to the interconnected network of organizations, institutions, and entities that provide support, resources, and service to individuals seeking academic objectives (Barile et al. 2016). This ecosystem encompasses a wide range of service, including academic support, career guidance, financial aid, student housing, and many others, with the main objective of creating a comprehensive and supportive environment that helps students succeed in their academic pursuits and achieve their professional and personal goals (Voropai et al. 2019).

Universities, governmental institutions, corporate organizations, and technological firms are some of the essential elements of the ecosystem. Each of these organizations has a specific function in supporting students in getting around the complicated HE system. For example, private organizations that provide help and direction on the college application process include counseling service for college admissions. Finally, technology firms provide

new and inventive ways for students to access and complete their education (Ferrary and Granovetter, 2009; Mason and Brown, 2014).

2.1.2.1.1 Higher Education Social Value

Due to its social significance and effect on economic development, HE has become a topic of enormous importance in modern society. According to Brown and James (2020), HE is fundamental for economic growth and innovation, because it is the platform to generate new knowledge and support the student to acquire skills for their personal and professional development.

Also, HE is considered a public good, since it not only benefits the individual receiving the education but also contributes to the development of society. As pointed out by Bowen (2018), HE has an important social value, as it contributes to the economic, social, and cultural development of a society. In turn, Bathmaker et al. (2016) argue that HE is fundamental for social mobility, as it provides individuals with the skills and knowledge necessary to access better-paying jobs with greater growth opportunities.

In the development of obedient, environmentally conscious citizens, HE is equally crucial. As stated by Smith (2020), HE is essential for developing leaders who can address the issues facing the society of today. Additionally, Flynn et al. (1990) emphasize the value of HE in promoting diversity and inclusion in society by giving historically underrepresented groups access to educational opportunities. In addition, HE also has a positive impact on the health and well-being of the population, due to is associated with longer life expectancy, lower incidence of chronic diseases, and better quality of life. Likewise, historically has been an important factor in promoting gender equality and reducing violence against women (Samad et al. 2022).

2.1.2.1.2 Complexity of the Ecosystem

The ecosystem of HE is indeed a complex system that encompasses various living components (actors) such as students, professors, public administrations, alumni, prospective students, families of the students, university council, service personnel, society, unions, local public administrations, private institutions, and accreditation bodies. These elements are

interconnected and interdependent, and they all converge in the same site, but also, all coexist in the HE service ecosystem with a variety of non-living elements that have an impact on how these actors interact in different ways.

Examples of these non-living elements include the financial resources of the university, laws and regulations, cultures and idiosyncrasies, management style, student selection procedures, faculty recruitment systems, country reputation, and university reputation (Díaz-Méndez et al. 2019). Table 1 shows the HE service ecosystem involves various actors and Table 2 the non-living ecosystem elements.

On the other hand, the ecosystem of HE is the diverse range of educational institutions, which vary in size, mission, focus, and structure. Some institutions are publicly funded, while others are privately owned, and they range from large research universities to small liberal arts colleges (Marginson, 2006). In addition, another source of complexity is the rapidly changing nature of the job market and the increasing demand for highly skilled workers. This has led to a growing emphasis on the importance of HE, as well as the need for institutions to adapt to changing workforce demands and to prepare students for a rapidly evolving job market (Khan et al. 2022).

In addition to the foregoing, the accreditation process, which is designed to ensure that institutions meet certain standards of quality, also contributes to the complexity of the HE ecosystem (Crosling et al. 2015). The accreditation process is carried out by various accrediting agencies, each with its own set of standards and guidelines, which can create confusion for students and institutions alike.

Finally, the ecosystem of HE is affected by various economic, political, and cultural factors, including changes in government funding, shifts in public attitudes toward education, and the increasing globalization of the workforce (Constantinides, 2022; Stromquist, 2002). The ecosystem of HE is a complex and dynamic system that requires a nuanced understanding of the various elements that shape it, and a commitment to continuous improvement to meet the changing needs of students and society.

Table 1.
Higher Education living components (actors)

Actors	Description
Students	The primary beneficiaries of HE service, seeking knowledge, skills, and degrees.
Prospective students	These are individuals who are considering enrolling in an institution of HE.
Faculty and Staff	Individuals who design and deliver educational programs and service in HE.
Accrediting Agencies	Organizations are evaluating the quality of HEIs and programs.
Public administrations	Organizations are regulating and funding HEIs and programs.
Families of the students	Families of the students are also an integral part of the HE process, as they often provide emotional and financial support to students.
University council	It is the governing body and makes strategic decisions in the HIEs.
Non-Profit Organizations	Organizations supporting and advocating for access to HE service and providing funding and resources.
Alumni	The graduates of the institutions represent a valuable resource in the co-creation of value.
Service staff	This includes all personnel who provide operational and administrative support at the institution, such as admissions personnel, academic advisors, and technical support staff.
Society	The broader community of individuals who interact with and benefit from HE service.
Trade unions	Representing faculty, administrative staff, and other HE-related personnel plays a role in ensuring fair and adequate working conditions for employees in the sector.
Local public administrations	Are responsible for the regulation and support of HE institutions within their jurisdiction, they oversee the creation of policies and regulations affecting educational institutions.

Source: Own elaboration based on Díaz-Méndez et al. (2017)

Table 2.
Higher education non-living ecosystem elements

Non-living elements	Definition
Financial resources the universities	Refers to the money and assets available to the university, including budgets, investments, donations, and other financial income.
Laws and regulations	These are the legal norms and guidelines that govern the operation of the university, including aspects such as governance, student, and labor rights.
Cultures and idiosyncrasies	These are the unique values, traditions, beliefs, and practices that characterize the university community and its environment.
Management style	Refers to how the university is run and managed, including strategic decisions, organizational structures, and decision-making approaches.
Student selection procedures	These are the processes used to admit students to the university, which may include academic requirements, interviews, and evaluations.
Faculty recruitment systems	These are the methods and criteria used to hire new faculty and academic staff at the university.
Country Reputation	It is the perception and valuation that other nations and communities have of the country in which the university is located.
University Reputation	It is the evaluation and recognition that the academic community and the public give to the university in terms of quality and prestige.

Source: Own elaboration based on Díaz-Méndez et al. (2017)

2.1.3 The Marketization of Higher Education

The concept of HE marketization refers to the process of transforming this ecosystem into a market-oriented system where students are seen as traditional customers, universities are seen as producers, and education is seen as a commodity that is bought and sold (Judson and Taylor, 2014). This procedure entails the introduction of competition, consumer choice, and market-oriented decision-making in the provision of academic activities, driven by several factors, including the rising student demand, the diminishing role of public funding, and the expanding influence of neoliberal ideology (Banwait, 2021; Schelble, 2006).

In response to increased competition among universities to draw and keep students, HEIs around the world—both public and private—are rapidly embracing marketization strategies (Hemsley-Brown and Lowrie, 2010; Molesworth et al., 2010). Universities have been adopting strategies that prioritize student satisfaction over learning to survive and expand, frequently with little input from the students themselves. However, because generic marketing methods do not support academic goals, this emphasis on student happiness does not always result in better-trained students (Molesworth et al., 2010).

From an economic standpoint, the marketization of HE has been viewed as a response to supply and demand laws. A competitive market for education service has been established by the rising demand for HE and the growth of universities. Students are choosing the best universities that fulfill their requirements and expectations because universities are fighting for their enrollment by providing better education, facilities, and service (Molesworth et al., 2010).

Sociologically speaking, marketization has been considered a reflection of broader societal changes brought about by neoliberalism and globalization. The emergence of market-oriented policies has led to the commercialization of education and an increased emphasis on customer satisfaction and individual choice. As a result, universities are now expected to adapt to market demands and generate graduates who are highly qualified and employable (Salles-Djelic, 2006; Judson and Taylor, 2014). From the standpoint of education, it has caused institutions to change their emphasis away from providing education for the public good and toward providing education as a private good. Due to this, academic achievement, employability, and marketability have received more attention than critical

thinking and intellectual growth. (Dollinger et al., 2018; Schelble, 2006). Based on the above, it can be said that the commodification of HE raises fundamental questions about the values and objectives of academic training. While it is understandable that institutions seek additional resources to maintain and improve themselves, it is crucial to find a balance that does not compromise the very essence of HE. The educational ecosystem must remain a space for the pursuit of knowledge, intellectual development, and personal growth, rather than becoming a mere transactional product (Judson and Taylor, 2014; King and Bunce, 2020; Schelble, 2006).

2.1.3.1 Student-customer Analogy Debate

There is a polarized debate in the literature regarding the appropriateness of considering students as customers, starting from whether universities should adopt the student-customer analogy to manage them (Koris and Nokelainen, 2015). In favor of the mentioned analogy, (Guilbault 2016) urges us to stop denying students are customers and instead recommends responding to their needs and opinions.

Other authors like Lo (2017) and Lowrie and Hemsley-Brown (2011) have supported this idea, highlighting that universities face the challenges of a competitive market, such as the decrease in funding and student enrollment, so they must apply marketing strategies to achieve greater market share, just like any other organization, considering students as the main customer and recognizing them as actors in achieving service quality, being the main responsible for generating strategies that enable student loyalty and retention (Hillman and Orians, 2013).

In addition to the above, Petruzzellis et al. (2006) consider that universities should adopt the customer-student analogy due to the need to measure their performance through specific metrics, such as student satisfaction. Supporting the idea, Seeman and O'Hara (2006) proposed an information system focusing on the student as a customer and managing the interaction with all traditional, considering the importance of ensuring student satisfaction based on the perception of the students as an indicator of quality. Even though several researchers advocate the practicality of the systematization of treating the student as a customer and some studies tend to point to education in terms of customer service (Koris and Nokelainen, 2015) —in key factors such as the satisfaction the needs of the students and the

development of innovative forms of education in the field of HE ecosystem—, it has also been mentioned that applying the same customer-business model in universities can severely damage education (Wueste and Fishman, 2010). For instance, contradicting the student/customer treatment, several authors have mentioned that he should not be seen from the general marketing perspective (Hilton et al., 2021).

Supporting this counter position, Driscoll and Wicks (1998) suggested that applying the customer-business marketing analogy to universities, comparing the educational experience to the commercial exchange of value is dangerous for HEIs and opens the door to questioning their true purpose. Besides, Svensson and Wood (2007) emphasize that comparing students to customers when describing their relationship with universities is highly inappropriate, asserting that the student-university relationship is not limited to the purchase of a product and its use, as occurs in a customer-supplier relationship.

Supporting the approach that seeks to separate customer-business treatment from university management, Wueste and Fishman (2010), forcefully reject the use of customer service practice as applied to students, arguing that in most service areas customers can only determine their needs and pay for goods, or service to satisfy them, which systematically contradicts the service nature of education, thus alerting HEIs of its adoption, since given the similarity of certain characteristics of the with another service it could be very attractive to try to satisfy the needs of the students, in the same way, the satisfaction of the customers.

In this sense, Díaz-Méndez et al. (2019, p.6) go further and argue that "the designation of students-as-customers is subject to problematic interpretations and may jeopardize the HE quality by directly affecting attitudes of the students, understanding, and motivations and distorting or impairing the quality of their learning experience, resulting in detrimental consequences for social development and educational sustainability due to the quality decrease training professionals at the university."

More recent evidence that identifies the negative consequences of said analogy can be found in the work by Bunce et al. (2017) who demonstrated the relationship between consumer orientation, student identity, and academic performance, which highly alerts that students who identify themselves as customers are often less likely to actively participate in the development of their educational training, since by assuming themselves as customers

they expect positive academic results without participation, making professors responsible for their learning.

There is a more equanimity analysis that has emerged, in which one seeks the clear identification of learners through a specific criterion of the different treatments they may be subject to during service experience. In this regard, Koris and Nokelainen (2015) after conducting a study of how students expect to be treated, conclude that the student-customer analogy is appropriate for specific facets of the university-student relationship, such as feedback, classroom studies, and staff communication, but not suitable for other processes, such as curricular design, rigor, classroom behavior, and graduation.

Towards the maturity of differentiating the debate, Senior et al. (2017) propose a hybrid model for the growth of HEIs based on a consumer approach, in which positioning HEIs in a market environment is fundamental, but without neglecting the aspects of regulatory oversight, among which the essential regulations of university behavior and rigor stand out. In this way, those authors emphasize the importance of avoiding generating a strict market relationship with students, considering them exclusively as customers, understanding that this could be detrimental to their learning process.

Consistent with academic efforts to separate the management of students from that of customers, during the COVID-19 pandemic the limited or non-existing relationship between a customer and a student, as well as the management that both should be given, was highlighted with greater force. For instance, Calma and Dickson-Deane (2020) emphasize that students are different from customers, mentioning they first are learners within the teaching-learning process and not buyers of an educational experience, so the participation of the students cannot be reduced to the purchase of education.

Finally, and within the context of HE marketization, various authors refer to the business approach to educational management (Calma and Dickson-Deane, 2020; Guilbault, 2016; Scott, 2020) that alludes to the customer/student analogy as a practice that seeks commercial benefits over the fulfillment of academic objectives. Scott (2020) points out that when students are assimilated as customers they want to be satisfied and not challenged, and hence they passively participate in an “entertaining” class discussion but without academic rigor. In this regard, Plamper (2023) mentions that students take on the role of customers when it is convenient for them. Table 3 shows a summary of the works addressed.

Table 3.
Student-customer analogy debate

Research	Main concept	Author(s)	Year	Country	Journal
The customer-driven approach in Business Education: A possible danger?	Against student-customer and university-company analogy	Driscoll and Wicks	1998	Canada	Journal of Education for Business
Student satisfaction and quality of service in Italian universities	Universities need a customer-centric approach	Petruzzellis *et al*.	2006	Italy	Managing Service Quality: An International Journal
Customer relationship management in higher education	The student-centric focus improves customer data process management	Seeman and O'Hara	2006	USA	Campus-Wide Information Systems
Are university students customers? When illusion may lead to delusion for all!	The indiscriminate use of the student/client treatment is inappropriate	Svensson and Wood	2007	Norway and Australia	International Journal of Educational Management
The customer isn't always right: Limitations of 'customer service approaches to education or why Higher Ed is not Burger King	Customer service does not consider collaboration, participation, and reciprocity during the teaching-learning process	Wueste and Fishman	2010	USA	International Journal for Educational Integrity
The student-customer orientation questionnaire (SCOQ). Application of customer metaphor to higher education	Student/customer as customers in service activities, but not during academic activities	Koris and Nokelainen	2015	Finland and Estonia	International Journal of Educational Management
Students as customers in higher education: Reframing the debate	The student is the customer of the university but from the new conceptualizations of the customer role	Guilbault	2016	USA	Journal of Marketing for Higher Education
I can't get any satisfaction: Measuring student satisfaction in the Age of a Consumerist Higher education	Student satisfaction is a key concept in the modern consumerist	Senior *et al*.	2017	UK	Frontiers in Psychology

The student-as-consumer approach in higher education and its effects on academic performance	Students who identify themselves as customers tend to perform less well academically	Bunce *et al*.	2017	UK	Studies in Higher Education
Improving Society by Improving Education through Service-dominant Logic: Reframing the Role of Students in Higher Education	Traditional management practices simplify the complexity of the educational service	Díaz-Méndez *et al*.	2019	Spain, Colombia, and the UK	Sustainability
The student as a customer and quality in higher education	The application of traditional management concepts represents a problem for educational quality	Calma and Dickson-Deane	2020	Australia	International Journal of Educational Management
Higher education's marketization impact on the instructor's moral stress, identity, and agency	The HE marketization limits professors from performing their tasks efficiently	Scott	2021	Thailand	ERIC Journal
Student-as-customer discourse as a challenge to equality in Finnish higher education – the case of non-fee-paying and fee-paying master's degree students	Public HEI students also adopt the position of clients when it suits them, thus recognizing their privilege.	Plamper, Siivonen and Haltia	2023	Filand	International Studies in Sociology of Education

Source: Own elaboration

2.1.3.2 Service ecosystem pollution

In 1946, the Argentine government imported pairs of beavers from Canada to breed in Tierra del Fuego, to achieve benefits in the area. However, today there are more than 150,000 beavers on the island and they are considered uncontrollable pests, since they alter the ecosystem, and their insertion threatens the functioning of the rest of the environment. Beavers in Canada were not a pest but removing them from their ecosystem and taking them to a "similar" one was a mistake that the government now seeks to remedy, among other strategies, by eradicating the species from the ecosystem. However, this strategy is very costly and complicated, and even when implemented, the damage to the ecosystem is severe (Baldini et al., 2008; Lizarralde, 1993; Schiavini, et al., 2016).

The above illustration helps to visualize how an element or actor, that functions and is part of an ecosystem, may not be so in another, even when there are well-intentioned strategies that seek to achieve efficiency and effectiveness, because even when ecosystems share certain characteristics, their particularities make them function differently. In this sense, expecting and accepting the customer value co-creation behavior in students when they are co-creating value during academic activities is a threat to the functioning of the HE service ecosystem (Díaz-Méndez et al., 2017). The student is the main actor of the service and their contribution and interaction in the teaching-learning (Svensson and Wood, 2007).

The article "Pollution in the Management of the Higher Education Service Ecosystem" by Díaz-Méndez, et al., (2017) explores the concept of pollution in the management of HE service ecosystems, defining it as the presence or introduction of disruptive elements in the service ecosystem that negatively affect the nature of the value-added creation processes. The authors argue that HEIs, like other service organizations, face several challenges related to pollution, which can negatively impact the quality of the service they provide.

These authors highlight the negative effects that using student evaluation surveys for faculty, students, and other participants in this process has on them. The authors argue that institutions should embrace a service ecosystem perspective grounded in SDL. They also highlight the role of institutions in mediating interactions between participants and their interactions. Also, the authors mention that the ecosystem approach promotes flexibility as an inherent quality of the idea by highlighting its capacity to respond on its own when faced

with environmental changes; nevertheless, it says little about disruptive changes, which impair ecosystem function by preventing value co-creation, suggesting that the environment cannot adapt to it and that it must be fought.

Finally, it is possible to consider that to help students better comprehend the context of their chosen professions, educational institutions should encourage them to enroll in additional university courses that complement their major study. Supporting student mobility is essential for developing their cross-cultural competencies and extending their horizons through the development of adaptable abilities and encouraging participation in school activities can also improve learning as a whole (Bovill et al., 2011; Bovill, 2020; Dollinger et al., 2018).

2.1.4 Higher education value co-creation

Co-creation of value in HE has become a fundamental approach internationally. Under the Service-Dominant Logic (SDL) perspective, the HE service ecosystem is no longer limited to the mere transmission of knowledge from faculty to students but is conceived as a collaborative process in which both parties actively contribute to value creation. Students play a central role as co-creators of their own educational experience, contributing to their individual needs, expectations, and skills, while educational institutions adapt effectively to meet these demands.

In this sense, the value co-creation in HE manifests itself through a collaborative dynamic between HEIs and students, this interaction resembles a co-production relationship, where both contribute resources and efforts to achieve a valuable outcome. In addition, students participate in the co-design of their academic programs, select course options, and contribute their unique classroom experiences and perspectives. In doing so, they not only acquire relevant knowledge and skills but also enrich the quality of teaching and the educational experience for the entire university community. In addition, value in use is highlighted, which relates to how students construct and experience the value propositions provided and how HIEs and students use what they have co-produced.

Due to the HE value cocreation is manifested when students actively participate in their learning process, their behavior is essential to generate an environment of active

participation, where the exchange of knowledge and experiences enriches training. To properly understand the concept of SVACB is important to consider the expectations of both educational organizations and students. Based on the foregoing, the article "Framing Higher Education Quality from a Business Perspective" by Cavallone et al. (2021), emphasizes how collaboration can influence the quality of education. In addition, the role of the student is a key factor, as students are a fundamental part of generating, HE value co-creation.

In addition, Magni et al. (2020), dive into the co-creation behavior of the students. This study highlights how accessibility and knowledge reuse can be key factors in education, without forgetting that this accessibility is related to student satisfaction and its importance as a component in value co-creation. In concordance, Elsharnouby, (2015) investigates how the satisfaction of the students with their college experience relates to their co-creation behavior, from participative behavior and citizenship behavior within the educational community.

On the other hand, collaboration and the mutual sharing of resources may have a profound impact on the HE quality. When students, faculty, and HEIs come together to generate knowledge, expertise, and learning materials, they create a rich and dynamic learning environment that benefits everyone involved. This collaborative approach fosters a sense of community and engagement among students, encouraging them to actively participate in their educational journey. In this sense, collaboration and mutual sharing of resources can have a significant impact on the HE quality, even more, co-creation may enhance educational experiences and its quality (Smørvik & Vespestad, 2020).

On the other hand, it is relevant to consider the importance of value co-creation in the classroom as a factor that influences student engagement in HIEs. This implies that both faculty and students have an active role in creating a meaningful and valuable educational experience, which promotes a collaborative approach to the teaching and learning process. The integration of operational and operative resources in the classroom may boost student motivation, participation, satisfaction, and academic success, thus improving student engagement.

In conjunction with the preceding, technology plays a vital role in HE values co-creation as both personal and technological factors influence value co-creation in both face-to-face and online university environments (Al-kumaim et al., 2021). Supplementing the

aforementioned Jain et al., (2022) highlight that technology facilitates multi-stakeholder co-creation, and the need to build strong relationships with the actors for the effectiveness of the experience. In addition, technology, such as social media and online platforms, has transformed relationships. Not forgetting that such technology should not be exclusive to private institutions, since the premise that only those who pay are entitled to receive benefits, does not apply to the HE service ecosystem (da Silva et al., 2020).

Also is relevant to consider that the context of the COVID-19 pandemic has presented unique challenges for the HE service ecosystem worldwide, affecting student benefits in this context of uncertainty (Leem, 2021). In response to such a challenge that changed and disrupted the normal functioning of traditional education, social networks have played a role in the value of co-creation behavior, as through co-creation activities, in branded communities on social networks, some HEIs have been able to enhance the student experience and strengthen the relationship between the institution and its students (Fujita et al., 2017).

Also, in modeling HE value co-creation, Dollinger et al. (2018) present a conceptual model that integrates business approaches and marketing literature for a better understanding of this process, using a lens of co-creation cultivated through business and marketing literature. In summary, HE value co-creation as a multifaceted topic involving students, educational institutions, technology, and the collaboration of multi-actors. These international studies offer a comprehensive view of how value co-creation is transforming the HE service ecosystem around the world, improving educational quality and the student experience. Table 4 the Higher Education value co-creation theoretical perspective.

Table 4.
Higher Education value a co-creation theoretical perspective.

Title	Author	Journal	Main idea	Research
Student co-creation behavior in higher education: the role of satisfaction with the University experience	Elsharnouby (2015)	Journal of Marketing for Higher Education	It explores what constitutes students' satisfaction of the students with the experience and examines the influence of overall satisfaction with the university experience on students' co-creation behavior – namely, participation behavior and citizenship behavior	Applied Research
An ethnography of a university's social media brand community: Exploring collaborative co-creation tactics	Fujita et al. (2017)	Journal of Global Scholars of Marketing Science	This research explores the nature of collaborative co-creation in a university-initiated social media brand community (SMBC). SMBCs provide significant opportunities to enhance student experiences by facilitating the co-creation of value and brand meanings.	Theoretical research
Co-creation in higher education: towards a conceptual model	Dollinger et al. (2018)	Journal of Marketing for Higher Education	Presents the first conceptual model of value co-creation in HE higher education using a lens of co-creation cultivated through business and marketing.	Theoretical research
Towards a framework of students' co-creation behavior in higher education institutions	Magni et al. (2020)	International Journal of Managerial and Financial Accounting	Systematic literature review to identify its content, boundaries, and main themes. In University 4.0, a competitive advantage can be achieved if knowledge is accessible and reusable by all actors.	Theoretical research
Bridging marketing and higher education: resource integration, co-creation, and student learning	Smørvik and Vespestad (2020)	Journal of Marketing for Higher Education	This article investigates how the value created through co-creation and mutual resource exchange can contribute to higher educational experiences.	Applied Research

A Bibliographical Analysis in the Literature of Value Co-Creation in Private Higher Education	da Silva et al. (2020)	Independent Journal of Management & Production	The present research aims to present a bibliographical analysis of scientific. Publications on the theme of "value co-creation in private HE", were carried out from 2006 to 2016.	Theoretical research
Framing higher education quality from a business perspective: setting the conditions for value Co-creation	Cavallone et al. (2021)	Studies in Higher Education	The article aims to elicit the value expectations of private and public sector organizations, emphasizing their potential role in the dynamics of value co-creation. To shed light on these issues, a case study approach was adopted.	Applied Research
An Effect of value co-creation on student benefits in the COVID-19 pandemic	Leem (2021)	International Journal of Engineering Business Management	The study is to propose a theoretical framework for a value co-creation process based on Service-dominant Logic Service-dominant Logic and to explore the effect of value co-creation on student benefits in a HE higher education environment	Applied Research
Value Co-creation in the Classroom as an Antecedent of Student Engagement in Higher Education Institutions	Araujo et al. (2021)	Administração: Ensino e Pesquisa	Analyze the effects of value co-creation in the classroom as an antecedent of engagement in HE higher education students.	Applied Research
Sustaining Continuous Engagement in Value Co-creation Among Individuals in Universities Using Online Platforms:	Al-Kumaim et al. (2021)	Frontiers in Psychology	This study aims to empirically examine customer-personal factors that lead to value co-creation engagement, considering HEI technological capabilities that guarantee such user interactions.	Applied Research
A multi-stakeholder perspective of relationship marketing in higher education institutions	Jain et al. (2022)	Journal of Marketing for Higher Education	Discusses a robust narrative of the relationship between HE higher education and the actor's stakeholders in the digital era.	Applied Research

Source: Own elaboration

2.1.4.1 The role of the student co-creating value

Marketing management is aiming to shift towards a service-based exchange logic that emphasizes the importance of understanding the context in which value is created. (Permatasari and Dellyana, 2021). Due to this approach challenges the traditional producer-customer relationship and advocates for more customer participation to generate value jointly, the HEIs that adopt co-creation do not claim to know the ideal needs of their students but instead prioritize maximizing student participation and interaction in teaching-learning processes to achieve more comprehensive outcome (Bovill, 2020). This approach differs from HEIs that solely rely on their faculty to create value for students (Dollinger et al. 2018).

According to Vargo et al. (2008), marketing strategies that aim to create service-based exchanges rely on two interconnected elements: a) the service itself, which involves utilizing the resources to benefit another party involved in the exchange, and b) the value that is always co-created because of this exchange. In this sense, the author claims that the service ecosystem perspective is the most appropriate way to understand this relationship, also proposing a new concept of HE sector value, considering its unique characteristics.

In concordance with the above, Akaka et al. (2013) mention that value is subjective and can vary from person to person and situation to situation. This is relevant in the context of HE, as even if faculty use the same methods and tools, the outcome of student learning may differ (Doyle et al., 2021). Additionally, based on the principles of SDL, value is always co-created and not solely the responsibility of the faculty (Díaz-Méndez et al., 2019). This means that multiple actors, including the student, contribute to the creation of value propositions, and the faculty cannot simply transfer knowledge to the student, they can participate in the joint creation and delivery of value (Magni et al. 2020).

The third characteristic of value is that it is multidimensional and created through coordination between actors and institutional arrangements. This means that the social context and culture in each university community influence the concept of value and how it is created. As a result, the value of HE is subjective and changes over time and in different environments (Ranjan and Read, 2016).

Additionally, the fourth characteristic is that value is emergent, which means that it is created or destroyed through the exchange of resources within an ecosystem. Therefore, students are responsible for creating or destroying their knowledge of the actors in the

ecosystem. These ideas were discussed by the authors (Lintula et al., 2018). Dollinger et al. (2018) underline the necessity of keeping the references to the co-creation and/or co-destruction of value within the ecosystem, which can result in opposing but closely linked results. They emphasize co-production and value in use as fundamental components of value creation in the HE service ecosystem.

Although these elements are based on the general principles of customer value co-creation proposed by Tommasetti et al. (2017), underlining the significance of depth and quality of co-production in the HE environment, as it entails students actively participating in the teaching-learning process and integrating their knowledge and experiences. The authors also emphasize that the quality of student contact is critical, and that value in use in the HE service ecosystem necessitates students personalizing their service experience and leaving a lasting impression.

In addition to the above, Magni et al. (2020) recently explored co-creation behavior in HE and highlighted community involvement and interactive technology as contributing variables. They underlined the importance of communication in achieving effective interaction and that the communication capacity of its members is critical to the effectiveness of HEIs. While HEIs provide facilities and resources and faculty offer knowledge and skills to facilitate the learning process of students, student participation with their skills and knowledge completes the ideal triangle of the value of HEIs (quality, communication, and participation) as mentioned by Bovill, (2020).

The value co-creation approach in HE is concentrated on building key skills in university graduates, such as critical thinking, effective reading, and writing, complicated problem-solving, and a grasp of varied settings (Soini et al. 2019). This distinguishes the educational service from other service ecosystems since its goal is to support personal and academic improvement over time (Díaz-Méndez et al. 2019).

To attain these objectives, educational practices that may make students uncomfortable and challenge them to generate value are used. This discomfort is a deviation from the satisfaction-driven approach of general customer service, which may cause problems in preserving the educational viability of the service. Despite the unique nature of educational service, there is a trend toward stressing student comfort and happiness, which

may undermine the HE purposes and its social value (Díaz-Méndez et al., 2017; Nie et al., 2019; Judson and Taylor, 2014; Schelble, 2006).

In this sense, the student is essential in creating value for both themselves and other people. By involving them actively in their education, they can improve the educational process and acquire skills, knowledge, and understanding that are useful to them. Setting goals and taking the initiative to look for opportunities that fit with their interests and aspirations is one method for students to take charge of their education (Dollinger et al., 2018; Xu et al., 2018).

Students have a significant role as co-designers, co-producers, and co-responsible in the HE service ecosystem, which is a partner in the process of learning design. To provide unique and interesting learning experiences that match the needs of each student, the involvement of the HE student as a co-designer is essential. Students may take ownership of their learning and contribute to their development and growth by working collaboratively with faculty and classmates during the design process (Dollinger and Lodge, 2020)

As a collaborator in the educational process. This implies that the students share responsibility for directing the educational process and ensuring a positive outcome with their instructors. In HE, the following are some of the major duties of a co-producer, the student may make learning more dynamic and interesting for their self and by accepting their role as a co-producer (Bovill et al., 2011). The idea of students as co-responsible in HE assumes a dynamic and participative function from the standpoint of Service-dominant Logic. This concept views education as a collaborative process in which students have an active role and contribute to both their learning and the educational process. Students are seen as co-creators and co-producers of value in the educational environment rather than as passive receivers of knowledge (Bovill, 2020; Calma and Dickson-Deane, 2020).

Students are seen as active agents with distinctive knowledge, skills, and experiences that can be shared and used to benefit themselves and others through the lens of the dominant logic of service. This view encourages students to take charge of their education, actively seek opportunities for personal and professional development, and bring their knowledge and insights to the classroom to make it more interesting (Bovill, 2020; Dollinger et al. 2018). Table 5 lists the traits that define a student as an ecosystem co-creator.

Table 5.
Student as a co-creator of value

Co-designer	Co-producer	Co-responsible
Feedback: Students provide feedback on learning experiences	Active participation in discussions and activities	Service orientation: Understanding education as a service and adopting a service-oriented attitude.
Collaboration: Students collaborate to find innovative solutions	Self-directed learning and resource management	Collaboration: Actively seeking opportunities to collaborate
Reflection: Students analyze growth and suggest improvements	By sharing knowledge and experiences	Autonomy: Self-management and informed decision-making
Empowerment: Students make informed decisions about education	Embracing challenges and learning from failures	Reflection and continuous learning open-mindedness and adaptability

Source: Own elaboration based on Dollinger et al. (2018)

2.1.4.1.1 Student value co-creation behavior

Co-creation in the HE service ecosystem refers to the active involvement of students in the design and delivery of their own learning experience, as well as the broader development of the university environment (Denton and Mcllroy, 2018; Magni et al., 2020; Purcell et al., 2019). This process requires a shift away from traditional faculty-led approaches to education, towards a more collaborative and inclusive model that engages students as partners in learning.

Student value co-creation behavior refers to the process by which students actively participate in creating and shaping their own educational experiences (Köpeczi-Bócz, 2020). The value of the educational experience for all students can be further increased by institutions if they actively seek out and incorporate student feedback into their procedures (Denton and Mcllroy, 2018).

As students take a more active part in creating their own learning experiences, value co-creation in education is becoming more and more significant. When students contribute with their perspectives, experiences, and ideas to the discussion, they acquire new skills, and

forge closer relationships with their peers and faculty by actively participating in the creation of value (Foroudi et al., 2019). Hence, their active behavior may also be advantageous to the educational setting because it may enhance methods of teaching and learning and result in higher levels of satisfaction among students and a more satisfying learning environment as a whole (Seeman and O'Hara, 2006).

The co-creation behavior usually maintains some characteristics of the CVCB generality; however, there are also relevant differences, The SVBC refers to the actions and activities that students engage in to actively contribute to value creation (Díaz-Méndez et al., 2019; Dollinger et al., 2018; Judson and Taylor, 2014). This can involve a range of behaviors, including active class participation, collaboration with peers and instructors, seeking out additional resources, and providing feedback on the learning process, involving the actions and activities of students that contribute to the creation and enhancement of value (Dollinger et al., 2018; Judson and Taylor, 2014; Köpeczi-Bócz, 2020).

This SVCB can take many forms, including actively participating in class discussions, taking part in group projects, looking for additional learning resources and opportunities, giving professors and institutions feedback, and helping to create a welcoming and inclusive learning environment, among other cognitive and behavioral activities that are neither required nor necessary for clients looking for a hotel to rest, a restaurant to eat or a bar to have fun (Torkzadeh et al., 2020; Wueste and Fishman, 2010).

To foster SVCB, institutions, and faculty should create opportunities for students to actively participate in their learning. This involves using collaborative learning techniques, providing students with opportunities to give feedback on the course content and teaching methods, encouraging students to take an active role in their learning, providing opportunities for students to participate in decision-making and contribute to the design of their own learning experiences, and fostering a supportive environment that encourages and rewards active engagement (Kumari et al., 2020).

To talk about cognitive behaviors and activities, within the educational field, firstly it is necessary to consider the teaching-learning in the HE service ecosystem. Driscoll and Wicks, (1998), define learning as "a persisting change in human performance or performance potential, which must come about as a result of the experience and interaction with the

world". In this sense, Bezanilla et al. (2019) present a compilation of the teaching-learning main activities. Table 6 shows the main teaching-learning activities in the HE ecosystem.

Due to the SBCV is composed of cognitive and behavioral (Tommasetti et al., 2017) to achieve the required academic objectives (Dollinger et al. 2018), the education literature has provided theoretically the key behaviors and cognitive activities that are essential for the academic objectives. Table 7 shows the main student cognitive activities, and Table 8 shows the main behaviors in the HE ecosystem. By incorporating these cognitive and behavioral activities into the teaching-learning process, educators can foster the development of critical thinking, problem-solving, and communication skills, which are essential for success in academic and professional settings (Almulla and Al-Rahmi, 2023).

Table 6.
Teaching-learning activities

Activities	Definition
Lectures	In-person or virtual presentations by educators impart knowledge and concepts to students (Sinclair and Ferguson, 2009).
Discussions	Interactive sessions where students engage in conversations, analyze ideas, and express opinions (Routman, 2000).
Assignments	Tasks are given to students to apply and demonstrate their understanding of the course material (Rodman, 2010).
Group Projects	Collaborative tasks are where students work together to solve problems or complete projects (Sari, 2019).
Research	Systematic investigation generates new knowledge, often culminating in a thesis or paper (Stringer et al., 2009).
Peer Reviews	Evaluation of the work done by students by their peers fosters constructive feedback and improvement (Geithner and Pollastro, 2016).
Seminars and Workshops	Informative sessions focus on specific topics, often involving guest speakers or experts (Hounsell and Entwistle, 2006).
Evaluation	Measurement of student progress, achievement, and competencies concerning established educational objectives (Leibowitz et al., 2016).

Source: Own elaboration

Table 7.
Cognitive activities

Cognitive Activities	Description
Attention	The ability to focus on relevant information. Enhanced through activities like multimedia presentations, group discussions, and interactive learning (Bezuidenhout and Alt, 2011).
Perception	The ability to accurately perceive and interpret information. Facilitated by clear and understandable presentation of information (Wurdinger and Allison, 2017)
Memory	Essential for retaining information. Enhanced through techniques like repetition, summarization, and mnemonics (Billing, 2007).
Comprehension	Understanding the meaning of information. Enhanced through techniques like questioning, elaboration, and clarification (Doolittle et al., 2006).
Analysis	Breaking down information into smaller components and understanding their interrelationships. Encouraging critical thinking and analysis (Miller and Dumford, 2016)
Synthesis	Combining information from different sources to create new and original concepts. Providing opportunities for synthesis and creativity (Miller and Dumford, 2016).
Reflective Practice	Regularly reflecting on your learning journey, acknowledging strengths and areas for improvement, and setting goals to contribute to continuous personal and collective growth (Wlodarsky and Walters, 2006).
Critical thinking	Analyzing information, evaluating different perspectives, and forming well-reasoned opinions are essential for generating meaningful contributions to academic discussions (Billing, 2007).

Source: Own elaboration

Table 8.
Behavioral activities

Behavioral Activities	Description
Active participation	Engaging in classroom discussions, asking questions, and sharing insights contribute to the exchange of ideas and the creation of new knowledge collectively (Crisol-Moya et al., 2020).
Collaborative learning	Collaborating with peers on group projects, study groups, and joint research fosters a culture of shared knowledge creation and mutual understanding (Panitz and Panitz, 1998; Herrera-Pavo, 2021).
Sharing	Sharing relevant articles, research papers, and other learning materials with classmates enhances access to everyone to valuable information (Moran et al., 2011).
Feedback	Providing thoughtful feedback to peers on their work promotes a culture of improvement and supports the refinement of ideas and projects (Merry et al., 2013).
Peer teaching and learning	Explaining concepts to classmates not only reinforces your understanding but also helps others grasp the material better, fostering a culture of mutual teaching and learning (Falchikov, 2003; Clarence, 2016).
Application of knowledge	Applying theoretical concepts to real-world scenarios or projects demonstrates the practical relevance of academic content and contributes to the creation of practical solutions (Barrio et al., 2015).
Participation in extracurricular activities	Involvement in clubs, organizations, seminars, and workshops outside formal coursework can lead to interdisciplinary collaborations and innovative thinking (Chan, 2016).
Respectful and inclusive behavior	Valuing diversity, treating classmates and instructors with respect, and creating an inclusive environment foster a sense of belonging and enhance the overall learning experience (Hilton et al., 2021).
Responsibility	Taking ownership of your learning, initiating discussions, and proactively seeking help when needed to demonstrate a commitment to personal and collective success (Kuh et al., 2011).

Source: Own elaboration

2.2 Reference Framework

2.2.1 Application of SDL in Higher Education

An increasing understanding of the value of service in HE has emerged in recent years, both as a tool to improve the educational experience and to help the institution achieve its larger social and economic objectives. As a result, HE should adopt a more service-oriented philosophy known as the SDL (Ford and Bowen, 2008).

In connection with the foregoing, Mazzarol and Soutar (2015) develop a systematic review of the literature, after which they conclude that HEIs are becoming more complex service systems, as they seek to meet the needs of a diverse range of actors. This requires a more holistic approach to the design and delivery of educational service, which considers the broader context in which HE operates.

At the same time, however, there are challenges associated with the implementation of the SDL in HE. As Hemsley-Brown and Oplatka (2006) note it is challenging to identify and assess the results of service delivery due to the complexity of the service ecosystem and the diversity of its actors. This emphasizes the need for the development of suitable measurements and evaluation frameworks, as well as for a more nuanced understanding of the interaction between the SDL and the HE environment.

In this context, Grönroos and Gummerus (2014), contend that a relevant framework for comprehending the function of HE service is provided by the SDL. The co-creation of value between service providers and customers, which can be applied to the interactions between universities and their actors, is emphasized by the SDL, according to the authors. This point of view emphasizes how crucial it is to comprehend the requirements and goals of faculty, students, and other ecosystem actors when engaging in academic activities.

Also, Díaz-Méndez et al. (2019) expand on this viewpoint by claiming that the SDL has important ramifications for the management of HEIs. They contend that institutions should operate with a co-creation-centric mindset, putting a priority on providing top-notch service to participants like students. This necessitates a change from the conventional perception of universities as knowledge producers to one that is more service-oriented. Similarly, Cruz et al. (2022), claim that by taking a more active customer-centric approach and embracing the principles of cooperation, the HE ecosystem may gain from the SDL

perspective. This could result in the creation of new educational paradigms that are better suited to meeting the needs and expectations of students and other actors, such as blended learning and personalized learning.

More recently, the most plied way to understand the relationship between the SDL in the HE service ecosystem has been by examining how the technology influences ecosystem interaction. For instance, Karahasanović and Culén (2023) propose an SDL-informed framework for teaching innovation in the context of human-computer interaction (HCI) education involving large industrial projects to help institutions focus on the needs and preferences of students and other actors and to create innovative solutions that improve the quality and relevance of their educational offerings.

In general, the acceptance of the SDL in HE marks a considerable change in how that role is perceived in society. It has the potential to revolutionize the way we plan and provide educational service by putting more of an emphasis on the creation of value by all the actors, including the student, rather than on the production of knowledge or the delivery of a product (Gummesson et al., 2010). Table 9 shows the studies addressed.

Table 9.
Application of SDL in Higher Education

Research	Main concept	Author(s)	Country	Journal
Universities in a competitive global marketplace: A systematic review of the literature on higher education marketing	The complexity of the HE ecosystem and the diversity of actors make it difficult to define and measure the outcomes of service delivery	Hemsley-Brown and Oplatka (2006)	UK and Israel	International Journal of Public Sector Management
The service revolution and its marketing implications: Service logic vs. Service-dominant Logic	Service-dominant Logic (SDL) provides a useful framework for understanding the role of service.	Grönroos and Gummerus (2014)	Swedish	Managing Service Quality
Future Research Opportunities: A Systematic Literature Review and Recommendations for Further Research into Minority Entrepreneurship	The HEIs are becoming more complex service systems" as they seek to meet the needs of diverse actors.	Mazzarol and Soutar (2015)	Ireland	The Palgrave Handbook of Minority Entrepreneurship
Improving Society by Improving Education Through service-dominant Logic: Reframing the Role of Students in Higher Education	The role of HE in the development of societies is an unquestionable fact.	Díaz-Méndez, et al. (2019)	Spain, Colombia, and UK	Sustainability
Project-based learning in human-computer interaction: a service-dominant logic approach	Propose an SDL-informed framework for teaching innovation in the context of human–computer interaction (HCI) education.	Karahasanović and Culén (2023)	Norway	Interactive Technology and Smart Education

Source: Own elaboration

2.2.2 Applications of Value Co-creation in Higher Education

HEIs all over the world are working harder than ever to remain relevant in the quickly changing global economy, which is why the relationship between value co-creation and HE is becoming more and more significant. The HEIs are no longer seen as merely educational institutions, but as important actors in the knowledge economy who support the regional and national economies, societies, and cultures (Grönroos, 2006; Vargo and Lusch, 2017).

The co-creation approach has been widely implied in HE, for example in educational quality as seen by different actors of the ecosystem, one of them, entrepreneurs, and employers, for instance, Cavallone et al. (2021) explore the concept of quality in HE from a business perspective. The authors argue that HEIs may create value by focusing on co-creating value with their students, faculty, and other actors. The authors first discuss the importance of quality in HE and the challenges that this ecosystem faces in defining and measuring quality. They argue that quality is a multidimensional construct that involves not only the academic aspects of education but also the social and emotional aspects of the student experience.

Next, the authors introduce the concept of value co-creation, which is the process of jointly creating value with actors. They argue that value co-creation can help HEIs create a more personalized and engaging student experience, which can lead to better outcomes for students and the institution. Finally, they identify three key conditions: a customer-centric culture, a focus on continuous improvement, and the use of technology to facilitate communication and collaboration.

Other research that connects value co-creation with the HE service ecosystem is developed by Elsharnouby (2015), who studies what constitutes student satisfaction with the university experience and how student co-creation behavior is affected by overall student satisfaction with the university experience. The findings imply that perceived faculty competence and perceived university repute are the most important influencing factors in determining the happiness of the students with their university experiences.

Also, the results offer empirical evidence for the direct contribution that student happiness makes to encouraging student participation and civic conduct. The findings are

consistent with the hypothesis that the link between perceived faculty competence, perceived university reputation, and student citizenship behavior is moderated by student satisfaction.

In addition to the foregoing, Smørvik and Vespestad (2020) examine how value produced through collaboration and shared resource exchange might support HE experiences. The essay also demonstrates how marketing strategies may be used to encourage learning. In addition, the foreign said that the results demonstrate that the co-creation of values can influence the perceptions of the students about learning. The paper contributes to new methods of thinking that concentrate on the co-creation of value in teaching by connecting the theories of marketing and HE learning context.

More recently, Tarı Kasnakoğlu and Mercan (2022) presented a study incorporating operant resources as precursors to the development of a co-creative relationship. The authors mentioned that co-creation is also suggested as a mediator between resources and results in the paradigm. Finally, the quality of the relationship between students and faculty influences this one. Table 10 shows the studies addressed. Table 10 shows the studies addressed.

Table 10
Applications of co-creation of value in Higher Education

Research	Main concept	Author(s)	Country	Journal
Student co-creation behavior in higher education: the role of satisfaction with the university experience	Student satisfaction mediates the relationship between the antecedent variables of perceived university reputation perceived faculty competency and student citizenship behavior.	Elsharnoub (2015)	Qatar and Egypt	Journal of Marketing for Higher Education
Bridging marketing and higher education: Resource integration, co-creation, and student learning	Efforts of the students to participate in a variety of co-creation experiences, the data demonstrate that perceived learning takes place.	Smørvik and Vespestad (2020)	Norway	Journal of Marketing for Higher Education
Framing higher education quality from a business perspective: setting the conditions for value Co-creation	The HEIs are complex entities interacting with a variety of actors	Cavallone et al. (2021)	Italy and UK	Studies in Higher Education
Co-creating positive outcomes in higher education are students ready for co-creation	Co-creation is a mediator between resources and outcomes. Lastly, the bond between students and instructors moderates this relationship.	Tarı Kasnakoğlu and Mercan (2022)	Turkey	Journal of Marketing for Higher Education

Source: Own elaboration

2.2.3 The role of the student

On the other hand, the student has been considered an actor in the ecosystem and co-creator of value during academic activities. Dollinger et al. (2018) present an evidence-based model for student-staff co-creation in HE arguing that this approach offers a special chance for both parties to collaborate on developing cutting-edge teaching and learning strategies that can boost student engagement, satisfaction, and academic success.

The three main tenets of the concept of the authors are inclusion, reciprocity, and adaptability. Inclusion refers to the necessity of involving a wide range of actors, such as students, employees, and outside partners, in the co-creation process. In co-creation, reciprocity refers to the value of shared decision-making and mutual benefit, with equal input from both students and staff. The necessity for a responsive and flexible approach to co-creation, with continual evaluation and feedback to guide continuous progress, is referred to as flexibility.

The authors also offer helpful advice on how to employ co-design workshops, focus groups, and online collaboration tools to put the co-creation paradigm into effect. They also stress the significance of developing a co-creation-friendly culture and infrastructure, such as allocating specific staff time and resources, opening channels of communication, and recognizing co-creation efforts in hiring and promotion procedures. In addition to the foregoing, Dollinger and Lodge (2020), offer a helpful framework for developing and implementing student-staff co-creation activities. The approach offers a platform for meaningful and long-lasting collaborations that can improve the standard of teaching and learning and profit all parties involved by emphasizing inclusivity, reciprocity, and flexibility.

Within the HE ecosystem and its satisfaction, the value in use has been identified as the most valued by the student, Dean et al. (2016) assert that the SDL viewpoint, which emphasizes the significance of co-creation and value co-creation, can promote education as a service by improving student engagement, satisfaction, and learning results. The author illustrates through a case study of a university in Poland how it developed a co-creation platform that allows students to take part in the planning and delivery of courses and how

this has improved learning outcomes and student engagement and more student-centered and responsive education systems.

In addition, Navarro-García et al. (2014) suggest that new teaching strategies that emphasize the production of value through collaboration with students are necessary for institutions to adopt in the current global climate. The authors emphasize that because co-creation is a process of collaboration to create new knowledge and value that benefits both parties, it may entail changing the emphasis of education from the conventional teacher-centered model to a more student-centered model, where students are actively engaged in the learning process.

The authors contend that cooperative learning activities that allow students to collaborate to solve problems, come up with novel ideas, and share knowledge can support value co-creation. These activities can be done in a variety of ways, such as peer reviews, project-based learning, group discussions, and online collaborations. They claim that a range of competencies, including critical thinking, communication, creativity, and teamwork, must be cultivated for students to participate in value co-creation activities effectively. If students want to engage actively and passionately in their education.

In addition, and continuing in the same lexicon, Maxwell-Stuart et al. (2018), focus on the impact of the mode of study (part-time vs. full-time) and free status (home/EU vs. international) on HE student satisfaction. The authors surveyed undergraduate students in a UK university, asking about their satisfaction with various aspects of their course, such as teaching quality, assessment and feedback, and student support.

The findings could be used to inform policies and practices aimed at improving student satisfaction, such as providing more support for part-time students or customized support for international students, as the results showed that overall, full-time students were more satisfied than part-time students and home/EU students were more satisfied than international students. The essay offers insights into the elements that affect the happiness of the students with HE and stresses the significance of considering the various demands and experiences of various student groups. Table 11 shows the studies addressed.

Table 11.
The role of the student

Research	Main concept	Author(s)	Country	Journal
Value co-creation, collaborative learning, and competencies in higher education	Universities need to adopt new teaching methods that focus on the creation of value through collaboration with the students as the main actor	Navarro-García et al. (2014)	Switzerland	Sustainable Learning in Higher Education
Applying Service Logic to Education: The Co-creation Experience and Value Outcomes	The co-creation experience itself may provide value and, in certain contexts, the value may continue to emerge over time	Dean, et al. (2016)	Italy	Studies in Higher Education
An exploratory study of student engagement at transnational education initiatives: Proactive or apathetic?	Students primarily identify the partner and consumer models. Significant levels of apathy were found at the level of the students, the staff, and the university.	Maxwell-Stuart and Huisman (2018)	EUA	International Journal of Educational Management
Co-creation in higher education: Towards a conceptual model	This paper presents the first HE value co-creation conceptual model, using a lens of co-creation through business and marketing literature.	Dollinger, Lodge, and Coates (2018)	Australia and China	Journal of Marketing for Higher Education
Student-staff co-creation in higher education: an evidence-informed model to support future design and implementation.	The model highlights and distinguishes two dual-value creation dimensions that underlie co-creation, co-production, and value-in-use.	Dollinger and Lodge (2020)	Australia	Journal of Higher Education Policy and Management

Source: Own elaboration

2.2.4 Student value co-creation behavior

Within the lexicon of value co-creation, and to further operationalize this approach, co-creation behavior emerges. According to Vargo et al. (2015), value co-creation involves the joint creation of value by multiple parties, including the institution and the student. This concept suggests that both parties have a role to play in creating value and that the institution should work to actively engage students in the process.

In this sense, the concept of co-creation has become an increasingly popular practice in the HE service ecosystem. According to Bovill et al. (2011), students have an active and participatory role in the creation of teaching approaches, course design, and curricula. This approach involves close collaboration between students and faculty and is considered an effective way to improve the quality of education.

In addition, the authors address the growing trend of involving students as co-creators in the definition of pedagogical approaches, course design, and curricula in educational environments. The research highlights how this collaboration between students and academic developers can enrich the educational experience, fostering greater relevance and adaptability of curricula. By allowing students to contribute their perspectives and knowledge, personalization of learning is enhanced and a sense of empowerment and engagement with their education is fostered.

The article also explores the implications this student involvement has for academic development professionals. It highlights the need to adapt training and support strategies for faculty, recognizing the changing roles and dynamics in the classroom. Academic developers are challenged to create environments that foster genuine collaboration between students and educators, in addition to ensuring that student voices are valued and effectively incorporated into curricular decision-making.

Fagerstom and Ghinea (2013) utilize social networks as a platform to support this co-creation, addressing the growing significance of student and instructor collaboration in the development of value in HE. The authors emphasize how traditional learning and teaching dynamics are changing in favor of a more interactive and participatory approach, in which faculty and students both actively contribute to co-creating knowledge and enhancing educational experiences.

The article elaborates on the idea that social networks can serve as catalysts for this co-creation of value by providing instant and accessible communication channels. These platforms allow students to interact not only with their peers but also with their faculty, facilitating a collaborative environment that transcends the physical boundaries of the classroom. The authors highlight how online interaction can lead to the generation of diverse and personalized educational content, enriching the learning experience.

More specifically to mature the concept of value co-creation behavior, Yi and Gong, (2013) focus on the core idea of value co-creation between businesses and their customers. The study focuses on the establishment and validation of a scale to assess customer behavior in value co-creation. The authors acknowledge the growing significance of value co-creation as a practical business tactic to promote consumer involvement in the development of goods and service that are tailored to their requirements.

The context of the article, emphasizes the significance of comprehending and measuring value co-creation as a crucial component for business success today, emphasizing the need to move beyond conventional one-sided interactions and considering the active collaboration of the customers in the process of designing and improving products and service to direct businesses in adapting their approaches to achieve greater customer engagement, which will lead to an overall improvement in customer satisfaction.

Finally, Tommasetti et al., (2017) address the growing importance of value co-creation based on SDL theory. The article proposes a conceptual model for measuring customer value co-creation behavior, based on the concept that customers are not only passive recipients of service but also actively contribute to value creation through their participation in interactions and experiences, integrating cognitive and behavioral activities. It focuses on dimensions such as customer motivation for co-creation, their ability to participate and collaborate in value creation, and the influence of customer experience on joint value generation, to assess their participation in the process. Table 12 shows the studies addressed.

Table 12.
Student value co-creation behavior

Research	Main concept	Author(s)	Country	Journal
Students as co-creators of teaching approaches, course design, and curricula: Implications for academic developers	Theoretical background to arguments for including students as partners in pedagogical planning processes	Bovill et al. (2011)	UK	International Journal for Academic Development
Co-creation of value in HE: using social network	Applicants are invited to use their initiatives rather than simply react to predetermined marketing activities.	Fagerstom and Ghinea (2013)	Norway and UK	Journal of Higher Education Policy and Management
Customer value co-creation behavior: Scale development and validation	Development of a scale to measure customer value co-creation behavior and its validation.	Yi and Gong (2013)	Korea	Journal of Business Research
Measuring customer value co-creation behavior: Developing a conceptual model based on Service-dominant Logic	Proposal of a conceptual model to measure customer value co-creation behavior based on SDL	Tommasetti et al. (2017)	Italy	Journal of Service Theory and Practice

Source: Own elaboration

2.3 Contextual framework

In this contextual framework, different relevant aspects of the current situation of the HE service ecosystem in Mexico are addressed, as well as the challenges it faces today, having undergone several reforms and transformations in recent decades, identifying several relevant aspects, including the structure of the HE system, financing, educational quality, and accessibility (Hernández-Fernández et al., 2021).

The Mexican HE system is composed mostly of four different types of institutions: universities, technology institutions, technological universities, and “Escuelas Normales Superiores” (normal superior schools). The universities in Mexico are HE institutions that have a high degree of independence and autonomy in their operation and decision-making. They are usually research centers of great importance, where a wide variety of research is carried out in practically all disciplines. These institutions promote research and contribute to the advancement of knowledge in the country.

On the other hand, the technological institutes are a network of educational institutions that offer technical and technological education programs throughout the country. These institutes focus on areas related to technology, engineering, and management, and aim to train highly skilled professionals for industry.

In addition to the above modalities, technological universities, are institutions of HE that have a specific focus on training professionals in areas related to technology and engineering. Unlike traditional universities, these institutions are designed to provide practical, labor market-oriented education in fields such as computer science, electronics, mechanics, mechatronics, robotics, renewable energy, and many other technological disciplines.

Finally, the "Escuelas Normales Superiors" in Mexico are educational institutions whose main objective is to train professors, especially those who will work in basic school education in the country. These schools focus on providing high-quality training for future educators, with an emphasis on pedagogy, didactics, and the ethical and professional training of faculty. According to data from "Sistema de Información Cultural", by Secretaría de Cultura, considering all these types of public universities as well as counting the private universities, there are 3,056 HEIs in Mexico, with a total enrollment of around 4 million students in 2023.

In terms of funding, the government plays a significant role in HE in Mexico. according to the "Secretaría de Educación Publica" (SEP), the funding allotted to HE in fiscal year 2022 was almost 192 billion pesos, or roughly 1.1% of the GDP of the nation, despite this, finance continues to be a major obstacle for HE system in Mexico because demand outpaces the availability of sufficient funds from the government.

In terms of educational quality, there are various bodies in charge of the evaluation and accreditation of HE programs and institutions. The SEP oversees regulating and supervising the HE system in Mexico, while the "Consejo para la Acreditación de la Educación Superior" (COPAES) and the "Agencia Especializada en Programas Educativos" (CACECA) are some of the institutions in charge of the evaluation and accreditation of programs and institutions, among others. According to the report "Educación Superior en México 2020", around 66% of HEIs in Mexico have some type of accreditation (Olaskoaga-Larrauri et al., 2022).

In terms of accessibility, HE in Mexico still faces significant challenges in terms of equity and access. According to data from the "Instituto Nacional de Estadística y Geografía" (INEGI), the net enrollment rate in HE in Mexico is 23%, which means that only a quarter of the population between 18 and 22 years of age is enrolled in HEIs. In addition, there are regional and socioeconomic disparities in access to this educational level, which limits the capacity of HE to be an engine of development and social mobility (INEGI, 2020).

HE service ecosystem in Mexico as in several Latin American (LATAM) countries faces several challenges in terms of financing, quality, and accessibility (Fajardo, 2017). While there have been important advances in the regulation and evaluation of programs and institutions, there is still a need to improve its quality and accessibility throughout the country (Arjona-Granados et al., 2022).

2.3.1 The Marketization of Higher Education in Mexico

The marketization of HE in Mexico refers to the tendency to treat education as a commodity and to focus on maximizing profits instead of offering quality education to students. This phenomenon has had a significant impact and has been the subject of study and debate by academics and education experts (López Segrera, 2008; Ross and Gibson, 2007). In Mexico, HE has traditionally been funded by the government, but in recent decades, there has been a trend toward privatization. According to the INEGI (2020), 48.7% of university students were enrolled in private institutions. This represents a significant increase from 25.3%, according to the 2010 report.

This trend toward privatization has been largely driven by government policies that encourage private investment. Gonzalez-Sanchez et al. (2022) highlighted that these policies have encouraged the creation of for-profit HEIs, which have exploited the lack of regulation and control in the provision of educational service. In addition, the financing system has also contributed to marketization, because most HEIs receive government funding through the SEP, as a government office, but this funding is insufficient, and institutions often must rely on tuition fees and other revenues to cover their expenses.

According to the "Consejo Nacional de Humanidades, Ciencias y Tecnologías" (CONAHCYT), in 2022, 58% of funding for HEIs in Mexico came from tuition fees and

other revenues. In this sense, the marketization of the educational service has increased and taken on greater strength, resulting in an impact on the quality of education (CONAHCYT) 2023. According to Antón, (2018), Marketization in the education sector in Mexico, has generated a culture of quantitative evaluation that has led to the creation of "junk" universities that focus on the number of graduates and the amount of income generated rather than on the quality of education.

Is possible to say that, the Marketization in the Mexican HE service ecosystem has generated profound inequalities in access to academic training, as well as in the quality and relevance of educational programs (Antón, 2018; López Segrera, 2008). The privatization of colleges and the loss of funding for public education were encouraged by the neoliberal policies supported by Mexican governments in recent decades, which widened the wealth disparity in the nation (Laurell, 2015).

It is crucial to acknowledge HE as a fundamental human right and to encourage government spending on the development and upkeep of reputable institutions that provide equal chances for all Mexican students (Kraft and Furlong, 2019). To secure a more just and equitable future for future generations, it is also essential to promote the active participation of civil society and educational actors in decisions that affect HE in Mexico (Diaz-Barriga and Barrón, 2014).

2.3.2 Challenges and Opportunities for Higher Education in Mexico

The HE service in Mexico has several difficulties and opportunities that are critical to the progress of the country in the twenty-first century. Historically, this educational level in Mexico has seen significant growth in recent decades, increasing the number of institutions and student enrollment. However, this growth has not been sufficient to address several structural and cultural issues (Antón, 2018; Laurell, 2015).

One of the main challenges facing HE in Mexico is the lack of quality and equity (Alcántara et al., 2013). According to the "Consejo Nacional de Evaluación de la Política Pública" (CONEVAL 2022), the education gap in Mexico continues to be one of the most serious problems in the country and HE is no exception, due to and according to data from the INEGI (2020), only 24.5% of the population in Mexico had completed this level of

education. Also, lack of funding is a major problem for this educational sector in Mexico, because according to the World Bank (2020), Mexico invests only 0.5% of its GDP in HE, compared to the OECD average of 1.5%. This lack of funding has led to a lack of resources for universities and has prevented the expansion and improvement of academic programs.

Another major challenge for the HE sector in Mexico, as well as most countries worldwide, is the lack of connection between the HEIs and the labor market (de Matos Mello et al., 2020). Often, academic programs are not aligned with the needs of the labor market, which can lead to high rates of unemployment and underemployment among university graduates. According to INEGI (2020), the unemployment rate among university graduates in Mexico in 2019 was 3.4%, which is significantly higher than the average unemployment rate in the country.

There are, nonetheless, possibilities for HE in Mexico. There has been an increase in interest in online and remote education in recent years, which could provide a more accessible and cheap means to access HE diverse alternatives (Navarrete Cazales and Manzanilla Granados, 2017). In addition, new technologies may help align HE with the needs of the labor market by allowing greater flexibility in the creation of academic programs (Aljohani et al., 2022).

Furthermore, HE in Mexico has the potential to be a catalyst for the social and economic growth of the nation. The Inter-American Development Bank (IDB, 2019) claims that HE is a crucial component of innovation and the growth of new businesses and technology. If the issues are resolved, HE in Mexico might spur economic growth and lessen inequality in the nation. Finally, is possible to visualize that several sizable obstacles are approaching HE in Mexico, which in turn presents an opportunity for change. Important problems include ensuring equitable access, and high-quality education, upgrading curricula to match shifting workforce demands, and spending on technology infrastructure. Nevertheless, tackling these difficulties head-on creates chances for modernization and advancement (Ríos, 2015).

CHAPTER III
Methodology

Chapter III: Methodology

3.1 Methodological foundation

The methods of this research will be thoroughly described in this chapter. It starts by talking about methodological, ontological, and epistemological difficulties. Then the methodology research strategy is described, considering the three different phases of this research. This research uses a mixed methodology, which incorporates qualitative and quantitative focus into a single research. This ontological foundation is the notion that reality is complicated and multifaceted and that it cannot be fully comprehended from a single point of view (Antwi et al., 2015; Östlund et al., 2011). Therefore, a combination of methods and approaches is required to obtain a deeper and more complete understanding of a specific social reality (Dawadi et al., 2021).

3.1.1 Ontological, epistemological, and methodological elements

Mixed research, which combines elements of qualitative and quantitative research focus. The idea that reality is complex and multifaceted and that it cannot be fully understood from a single point of view is the ontological basis of this methodology (Ormston et al., 2014). The ontological foundation of this methodology is the notion that reality is multifaceted and complicated and that it cannot be fully grasped from a single point of view. (Östlund et al., 2011). In addition, mixed research recognizes that researchers have their subjectivity and that this can influence how are collected and analyzed. Therefore, the mixed methodology is also based on the idea that researchers should be reflective and aware of their perspective biases (Saeidi and Khaliliaqdam, 2013).

Mixed research, which integrates elements of qualitative and quantitative focus is used in this research. The fact that reality is multifaceted and complex and that it cannot be fully understood from a single point of view forms the ontological basis of this methodology (Ormston et al., 2014; Lewis et al., 2003). Due to the nature of the mixed methodology, which combines both quantitative and qualitative elements to obtain a deeper and more complete understanding of a phenomenon, this implies the integration of approaches and methods, to achieve triangulation of data and validation of results (O'Cathain, 2019).

The ontological foundation of this methodology is the notion that reality is multifaceted and complicated and that it cannot be fully grasped from a single point of view. This suggests being receptive to other points of view and acknowledging the underlying complexity of social reality. The foundation of mixed research is the idea that social phenomena are multifaceted and complicated, necessitating a thorough comprehension of the quantitative and qualitative variables involved in their comprehension (Muhibul, 2014).

Therefore, a combination of methods is needed to adequately analyze the data and reach more accurate and reliable conclusions (Ormston et al., 2014). The epistemological foundation of mixed research completes the understanding of a phenomenon and calls for the synthesis of multiple viewpoints and approaches, which denotes an acceptance of the complementary nature of various research methodologies and an openness to the inherent complexity of social reality (Raymond et al., 2010).

The most relevant and effective data collection methods and techniques must be chosen, together with the order and sample of data that will be gathered, as part of the research process. Including the research design, the defining of the research problem, the selection of the sample and population, the selection of data collection technologies, and data analysis methodologies, research methodology offers a structure and approach for conducting research methodically and rigorously. It should also cover moral issues (Flynn et al., 1990).

3.1.2 The epistemology of the Higher Education service ecosystem

The epistemology of HE service ecosystem research refers to the philosophical assumptions and theoretical frameworks that underlie its service ecosystem study. It encompasses the assumptions about the nature of knowledge, reality, and the relationship between the researcher and the research subject (Fien, 2002).

Epistemologically, HE service ecosystem research is based on a constructivist view of knowledge, which emphasizes the role of the researcher in constructing knowledge through their interactions with the research subjects. This approach recognizes that knowledge is subjective and context-dependent and that faculty must be aware of their own biases and assumptions. Overall, the epistemology of HE, emphasizes the importance of a

holistic and interdisciplinary approach to understanding its complexities (Angeli and Valanides, 2009).

Theoretical frameworks that are commonly used in HE include Systems theory, Service-dominant Logic (SDL), and Service Ecosystem Theory. These frameworks provide a conceptual basis for understanding the complex interactions between different actors in the service ecosystems, such as students, faculty, administrators, and external delivery of the actors. It recognizes the need for faculty to engage with multiple perspectives and to consider the broader social and political contexts in which the ecosystem operates (Lusch and Vargo, 2014).

3.1.3 The Epistemological of Higher Education student value co-creation behavior

The co-creation of value between service providers and service users is the focus of this theoretical paradigm. This epistemological research foundation is the Social Constructivist Theory, which holds that social interactions among people are how knowledge is created (Burr, 2018).

This viewpoint contends that students actively participate in the co-creation of value in educational settings by interacting with their faculty, peers, and the learning environment, according to studies on student value co-creation behavior (Dollinger et al., 2018). Because of this, the knowledge produced by this research is based on interactions between students and other educational actors and is jointly built through social processes.

This method of producing knowledge highlights the significance of context and the social component of learning, and it contends that students play a significant role in the co-creation of value in educational contexts. To completely comprehend the dynamics of HE value co-creation, it also underlines the relevant participation of the actors. In addition to emphasizing the value of context and the social aspect of learning, this approach to knowledge production also maintains that students have a considerable impact on the co-creation of value in educational situations (Judson and Taylor, 2014; Peschl et al., 2014).

3.2 Methodology of the research

The content of the research is integrated by a sequence of three phases. Starting with an empirical exploration of current Student Value Co-creation Behavior (SVBC) in the HE context, applying a Customer Value Co-creation Behavior (CVCB) scale designed and recommended by Tommasetti et al. (2017) for the educational ecosystem. Then, the identification of the influence of the process, institutional arrangements, and relationships from the perspective of the involved actors (experts and no experts), and ending with qualitative research through face-to-face and virtual co-creation sessions in Living labs, towards the construction of a specific SVCB theoretical proposal model, considering the ecosystem complexity. Each phase of the research responds to a specific research question and objective, so that between the phases the overall research objective is achieved. Table 13 shows the sequence and specific methodology of the research.

3.2.1 Type of research

- Research type, by its temporality: Cross-sectional.
- Research type, by its nature of measurement: Mixed (qualitative and quantitative).

3.2.2 Research question

General research question

- What are the expected behavioral and cognitive activities during academic interaction that integrate the student value co-creation behavior model in the Higher Education service ecosystem?

Specific research questions

- SQ1. What is the current value co-creation behavior of the students during interaction in academic activities in the Higher Education service ecosystem?
- SQ2. What is the influence of the processes, institutional arrangements, and relationships on the co-creation of value in the Higher Education service ecosystem?

SQ3. What cognitive and behavioral activities do service ecosystem actors consider of the Higher Education value co-creation student participation as a co-creator?

3.2.3 Research objectives

General objectives

To develop a conceptual model of Higher Education Student Value Co-creation Behavior from the perspective of Service-dominant Logic theory and service ecosystem approach, integrating the behavioral and cognitive activities required during academic interaction, to contribute to maintaining the social value of Higher Education.

Specifics objectives

- SO1.To explore the current student value co-creation behavior in a specific HE ecosystem by adapting the Tommasetti et al. (2017) value concretion customer behavior scale to verify the applicability in the Higher Education service ecosystem.
- SQ2.To identify the influence of the process, institutional arrangements, and relationships over Higher Education cocreating value, through exploring the involved perspective of the actors on the implementation and operationalization of co-responsibility and value in the use, to consider the ecosystem dynamic.
- SO3. To integrate the knowledge and experience of the actors involved in academic and management activities, through in-depth interviews and co-creation workshops with all the ecosystem actors, including the students, to identify the cognitive and behavioral activities needed and expected during academic activities to co-create value in a complex ecosystem.

3.3 General methodology of the research phases

The research process follows a defined sequence, beginning with an exploration of existing Student Value Co-Creation (SVCB) utilizing Customer Value Co-Creation (CVCB), primarily employing a quantitative approach. This initial phase serves as a validation to evaluate the necessity of new crafting proposals tailored specifically for students. Following this, the second phase involves a comprehensive examination of the value co-creation in the

specific HE service ecosystem through interviews and conversational methods, aiming to garner a more intricate and contextualized understanding.

In the concluding phase, the SVCB proposal model is directly formulated in collaboration with ecosystem actors, including students and other participants. A "Living lab" tool is employed, utilizing observation and narrative recording to identify and contextualize the authentic nature of student behavior in co-creation initiatives. This not only validates previous findings but also significantly contributes to the evolution of a novel SVCB model.

3.3.1 Phase I. Exploring the current student value co-creation behavior

This phase adopts a quantitative approach since its main objective is to measure and quantify the student value cocreation behavior in a specific service ecosystem. This approach provides the necessary structure to collect numerical data and perform statistical analyses (Queirós et al., 2017). In addition, this was a cross-sectional research, as it sought to assess the level of compromise generating value during the academic activities.

This method provides an accurate snapshot of the situation at a given time, which is essential for achieving the objectives set out in this research (Connelly, 2016). Additionally, explanatory research is conducted since its purpose is to representative results to obtain a general understanding of the topic under study. This approach allows the identification of key factors that influence the contributions of the students, thus adding a layer of knowledge to the quantitative results obtained (Johnson, 2001). Specific information on the methodology of this phase is presented in Chapter IV.

3.3.2 Phase II. Considering the Higher Education service ecosystem complexity

Utilizing a qualitative research methodology and employing semi-structured interviews as the primary data collection tool, this phase aligns with the HE value co-creation model developed by Dollinger et al. (2018). The model comprises two second-order constructs: Co-production, encompassing three first-order constructs (Knowledge, Equity, and Interaction), and Value-in-use, which includes three first-order constructs as well (Experience, Personalization, and Relationship). To gather insights from participants, six questions were

formulated based on each first-order construct for exploring the perspectives and opinions of the individuals involved. Specific information on the methodology of this phase is presented in Chapter V.

3.3.3 Phase III. Cognitive and behavioral activities of the student to co-create value

This phase applies the Living lab methodology to develop co-creation workshops (Hossain et al. 2019), interactive sessions facilitated by a neutral third party for ideation, prototyping, testing, and refining solutions. This workshop allows for observation and narrative recording and helps to identify and contextualize the real nature of the subject through constructive analysis, integrating other actors with co-creation initiatives (Knickel and Knickel, 2018).

The process includes the design of the workshop, applying the SISCODE Toolbox methodology, and adapting it to the regional context. For its development, virtual and face-to-face sessions are included, following the guidelines of the UNaLab European Network of Living labs with five phases: Ecosystem Challenge, Ideation, Strategy, Validation, and Feedback. Data collection involves ten different tools in virtual and face-to-face sessions, and the results are synthesized and aggregated in the analysis phase. The objective is to obtain information from ecosystem actors to address challenges in the HE service, prioritizing learning and value generation. Specific information on the methodology of this phase is presented in Chapter VI.

Table 13.
Research phases sequence

Research sequence to develop an SVCB conceptual model		
Phase I. Exploring the current student value co-creation behavior		
Research question	***Research Objective***	***Methodology***
SQ1. What is the current value co-creation behavior of the students during interaction in academic activities in the Higher Education service ecosystem?	SO1.To explore the current student value co-creation behavior in a specific HE ecosystem by adapting the Tommasetti et al. (2017) value concretion customer behavior scale to verify the applicability in the Higher Education service ecosystem.	Quantitative approach and explanatory research, online questionnaire through Google Forms, surveying 553 students, and SPSS software were used for quantitative data processing and analysis.
Phase II. Considering the value co-creation service ecosystem dynamic		
Research question	***Research Objective***	***Methodology***
SQ2. What is the influence of the processes, institutional arrangements, and relationships on the co-creation of value in the Higher Education service ecosystem?	SQ2.To identify the influence of the process, institutional arrangements, and relationships over Higher Education cocreating value, through exploring the involved perspective of the actors on the implementation and operationalization of co-responsibility and value in the use, to consider the ecosystem dynamic.	Qualitative research methodology, employing semi-structured interviews as the primary data collection tool, and ATLAS.ti 9 software was used for data processing and analysis.
Phase III. Determining the cognitive and behavioral activities of the students to co-create value		
Research question	***Research Objective***	***Methodology***
SQ3. What cognitive and behavioral activities do service ecosystem actors consider of the Higher Education value co-creation student participation as a co-creator?	SO3. To integrate the knowledge and experience of the actors involved in academic and management activities, through in-depth interviews and co-creation workshops with all the ecosystem actors, including the students, to identify the cognitive and behavioral activities needed and expected during academic activities to co-create value in a complex ecosystem.	Qualitative research, through the Living lab methodology to develop co-creation workshops, and content analysis matrix as well as ATLAS.ti 9 software was used for data processing and analysis.

Source: Own elaboration

CHAPTER IV

Exploring the current student value co-creation behavior (Phase I)

Chapter IV: Exploring the current student value co-creation behavior

4.1 Methodology and research design

This section of this research is focused on answering the SQ1. *What is the current value co-creation behavior of the students during interaction in academic activities in the HE service ecosystem?* Using quantitative, cross-sectional, and explanatory research (Johnson, 2001), is aimed at identifying the SVCB during academic activities.[1] For this purpose, this research has adopted the scale by Tommasetti et al. (2017) composed of the following 8 dimensions and 16 items; cerebral activities (4 items), cooperation (2 items), information research and collation (2 items), the combination of complementary activities, changes in habits (2 items), co-production (2 items), co-learning (2 items), and connection (2 items) Table 14 shows, in summary, the dimensions, items, and questions of the Tommasetti et al. (2017) scale that were developed to determine customer co-creation behavior but recommended for HE service ecosystems.

Dimension 1 - "Cerebral Activities": This dimension focuses on the importance of intangibilities in modern consumption processes, highlighting that the co-creation of value by users is mainly immaterial. It highlights the influence of motivational and psychological mechanisms on the propensity of the customers to co-create, proposing a hierarchical construct that includes eight complex activities related to the mental attitudes of the customers.

Dimension 2 - "Cooperation in Value Co-creation": Cooperation between suppliers and consumers in the value co-creation process is essential for success. Emphasis is placed on alignment with the basic demands of the suppliers, the implementation of tasks by consumers, and the responsibility assumed by consumers. Cooperation is presented as a key component, encompassing conformity, responsibility, and cooperative behavior in the service-user interaction.

Dimension 3 - "Search and Organization of Information": This dimension focuses on the search and organization of information, especially in the context of service provision. It stresses the importance of basic information actions for the co-creation of value, ranging

1. The main content of this chapter has already been published and is available in Zamora-Ramos, M. R., Chamorro-Mera, A., & Diaz-Mendez, M., (2023). Student Value Co-creation Value Co-creation Behaviour in The Higher Education Service Ecosystem: An Empirical Exploration. Marketing and Management of Innovations, 14(4), 140-150. https://doi.org/10.21272/mmi.2023.4-10

from preliminary searches to the organization of physical and virtual information. The role of technology in modifying and facilitating these activities is also highlighted.

Dimension 4 - "Combination of Complementary Activities": This dimension highlights user participation in additional service-related activities. It focuses on the integration of diverse resources and activities to meet customer needs, transforming co-creation from a top-down approach to an interactive exchange of knowledge from users to providers.

Dimension 5 - "Changes in Habits": Explores how consumers participate in the co-creation of value by adapting their behaviors in response to long-term changes. Includes activities such as pragmatic adaptation and change management, highlighting the transformation of the routines of the users and the creation of new value in themselves and their organizations.

Dimension 6 - "Co-Production": Explores the concept of co-production in the provision of service, where consumers actively participate in processes traditionally internal to companies. It is divided into co-design (user participation in the design of the supply offer) and co-delivery (negotiation and shared creation of a service between users and suppliers).

Dimension 7 - "Co-Learning": This represents a crucial phase in the co-creation process, where users seek and share information from various sources. It includes dimensions of sharing (transfer of information between consumers and providers) and feedback (unsolicited information transmitted from users to providers), fostering bidirectional learning and continuous service improvement.

Dimension 8 - "Connection": Focuses on the interactive nature of SDL, highlighting the connection between co-creation and effective relationships between participants. It highlights the importance of the intersection of relational and cognitive capital to generate real value, underlining the relevance of ongoing relationships even after service delivery.

Students in their first year of the bachelor's degree in marketing at a public university in Pachuca, Hidalgo Mexico, from March 18 to May 26, 2022, were surveyed. Through convenience sampling (Sedgwick, 2013), the criteria of selection for the students was a 100% passing rate in their courses, with a grade point average of 8.5 to 9.5 on a scale of 10. From a total of 553 students surveyed, 178 were eliminated due to missing values, with 375 surveys being used for analysis in the end. Table 14 shows the detailed information.

Table 14.
Adaptation of the Tommasetti et al. scale to the Higher Education ecosystem

Concept	Dimension	Indicator	Item
Customer value co-creation activities from the SDL perspective (Tommasetti, et al. 2017).	Dimension 1: Cerebral activities	Positive attitude	I aim to maintain a positive attitude toward my professors
		Tolerance	If the professors make a mistake during classes, I am willing to accept it
		Expectations	I have positive expectations about my relationships with my professors.
		Trust	I show the intention to accept vulnerability based on positive expectations about the behavior of others during classes.
	Dimension 2: Cooperation	Compliance with basics	I comply with the general guidelines of the faculty.
		Responsible behavior	I try not to create any problems while other students are enjoying the classes.
	Dimension 3: Information research and collation	Searching information	I usually search for information about what the classes are about.
		Sorting and assorting information	I usually take notes during the course to have a better learning outcome.
	Dimension 4: The combination of complementary activities	n/a	It is important to me to combine complementary learning activities during the course.
	Dimension 5: Changes in habits	Pragmatic adapting	I can adapt to the limitations derived from classes.
		Change management	I am willing to manage my time and modulate the influence of academic life on my personal life by engaging in extracurricular activities
	Dimension 6: Co-production	Co-design	I have a prominent role in the classes.
		Co-delivery	I usually contribute to resolving potential problems arising during classes.
	Dimension 7: Co-learning	Sharing information	It is very important to me to share information about classes with others.
		Feedback	If I have a useful idea on how to improve classes, I let the professor know
	Dimension 8: Connection	Relationship building	It is important to build relationships with professors during service
		Relationship maintenance	It is important to maintain relationships with professors after service provision.

Source: Own elaboration based on Tommasetti (2017)

Even when several scales have attempted to measure student value co-creation behavior from the customer perspective, the complexity, and particularities of HE need to be considered differently. For example, in some customer scales, one of the items asks whether the customer actively participates during service delivery. In this regard, the student may consider that asking several questions during the class is participating. However, their contribution to value co-creation is the sharing of prior knowledge, contrasting information, and developing participation under applied critical thinking, so there is a relevant difference between participating as a customer and participating as a learner.

Table 15.
Quantitative design research

Method	Tool	Objective	Sample
A questionnaire with The Likert scale with 5 options is used for the answers. (1) strongly agree (2) agree (3) neutral (4) disagree (5) strongly disagree	Online questionnaire through Google Forms	To explore the current student value co-creation behavior in a specific HE ecosystem by adapting the Tommasetti (2017) value co-creation customer behavior scale to verify suitability in the HE service ecosystem.	A total of 375 first-year marketing students (18-25 years old) from a public university in Pachuca, Hidalgo, Mexico were selected via stratified random probability sampling. SPSS software was used for quantitative data processing and analysis.

Source: Own elaboration.

4.2 Results

4.2.1 Exploratory Factor Analysis

Firstly, a Principal Component Factor Analysis (with Varimax rotation) was carried out on the 17 items of the value co-creation scale of Tommasetti et al. (2017) to check whether, when applied to the field of HEIs and student participation in the teaching-learning process, they are grouped into the exact eight dimensions. The reliability of this scale was assessed using Cronbach's alpha, the value of which reached 0.904, i.e., above the minimum level of 0.7 established by Nunnally (1978), and it was not necessary to eliminate any of the items initially suggested. The result of the Component Factor Analysis allowed us to reduce the 17 items into three dimensions, which explains 57.34% of their variance (Table 16). The KMO value is 0.921, a value considered very good according to Kaiser (1974).

The first dimension includes the items belonging to the original scale dimensions measuring "Information research and collation", "The combination of complementary activities", and "Changes in habits", as well as item 12 belonging to the Co-production dimension (specifically the item measuring co-design). Considering this grouping of things, this dimension can be called "pro-active learning" since it represents actions in which the learners seek to enhance or make the most of their learning process (Köpeczi-Bócz, 2020).

The second dimension includes the items belonging to the original scale dimensions measuring Co-learning and Connection, and the second item belonging to the Co-production dimension (namely, the item measuring co-delivery). By grouping these items, this second dimension can be referred to as "relationships with peers and teachers", as they involve positive interaction with these other people, both in the present and future.

The third dimension includes the six items belonging to the "Cerebral activities" and "Cooperation" dimensions of the Tommasetti et al. (2017) scale. This dimension can be called "attitude and responsible behavior", as it refers to the actions of the students that lead them to do the scheduled activities and for an excellent teaching-learning process. It can be said that it includes more passive measures than the other two dimensions.

Table 16.
AFCP results

Question	Dimension 1	Dimension 2	Dimension 3
1. I intend to maintain a positive attitude toward my professors.	0,322	0,178	0,601
2. If teachers make mistakes during lessons, I am willing to accept them.	-0,039	0,090	0,600
3. I have positive expectations about the relationships I build with my teachers.	0,265	0,362	0,574
4. I show an intention to accept the vulnerability of all participants in the class by generating positive expectations about the behavior of others.	0,187	0,144	0,782
5. I comply with the general guidelines of the teachers.	0,381	0,241	0,538
6. I try not to generate conflicts that may cause other students to stop enjoying the classes.	0,266	0,095	0,638
7. I usually look for information on the topics covered in the classes.	0,682	0,065	0,203
8. I usually take notes during the lessons to get a better result in my learning.	0,690	,127	,235
9. It is important for me to combine complementary learning activities during the course.	0,701	0,223	0,273
10. I can adapt to the constraints of the classes.	0,562	0,303	0,285
11. I am willing to manage my time and modulate the influence of academic life on my personal life by participating in extracurricular activities.	0,658	0,256	0,157
12. I have a participatory role during the lessons.	0,628	0,546	-0,006
13. I usually contribute to solving possible problems that arise during the lessons.	0,576	0,626	0,005
14. It is very important for me to share information about the classes with other colleagues.	0,368	0,639	0,281
15. If I have a useful idea on how to improve the classes, I let my teachers know.	0,363	0,646	0,102
16. It is important for me to establish academic relationships with the teachers during the course.	0,112	0,812	0,297
17. For me, it is essential to maintain academic relationships with professors after the course is over.	,069	,763	,278

Source: Own elaboration

4.2.2 Student segments according to their participation

Once the necessary factor analyses had been carried out, the next step in the research was to perform a cluster analysis using the three dimensions. Specifically, a non-hierarchical classification method (k-means clustering) was used, using the Euclidean distance squared as a measure. The value used was k=3, and the ANOVA mean difference test shows that the differences between the three segments are statistically significant at 99% for all variables.

The first segment is categorized as "students involved in active learning" because they are mainly characterized by giving high value to the dimension of "pro-active learning" but low value to "relationships with peers and teachers." They represent 29.8% of the respondents. This is the segment that has a medium value for co-creation.

A second segment, representing 18% of the sample, is characterized by low values for the items of all three dimensions. They are categorized as the "Students with low co-creation value students" segment. The third segment includes "students with high co-creation value," representing 52.2% of the sample.

The variables that exhibit the strongest correlation between the customer scale and student model are least effective among students, meaning they function well as customers but not as students. While students engage as typical customers, their impact on production items and value in use is minimal. Consequently, students tend to attribute their knowledge solely to the faculty, overlooking their role as co-creators. Refer to Table 17 for a summarized overview of the segments.

Table 17.
Student segmentation

Dimension	Involved in active learning	Low co-creation value students	High co-creation value
Dimension 1: "pro-active learning"	0,25589	-0,32141	-0,03541
Dimension 2: "Relationships with peers and Teachers"	-1,19795	0,15623	0,63147
Dimension 3: "Attitude and responsible behavior"	0,21560	-1,56546	0,41729

Source: Own elaboration

4.3 Conclusions of the research phase

This study has explored how students co-create value in a specific Mexican HE context, contributing to identifying the current student participation as an ecosystem actor. The main result is that 52.2 % of a sample of students show optimal co-creative behavior during academic activities, while 29.8% show medium co-creative behavior through their willingness to be proactive but do not show readiness for collaborative and participatory work with their classmates and faculty. Finally, 18% of the students show a low disposition to be co-creative actors during academic activities.

These results occur in the context of public HE in Mexico, a sector that requires the deep involvement of its actors to integrate their resources and jointly generate value, and consistent with those obtained by Botti et al. (2017) the results highlight that learners are not exclusively involved in the delivery phase, due to the inclusive nature of the value co-creation process specifically in the educational sector, emphasizing the existence of a pre-delivery phase (brain activities, cooperation, search, and information gathering) and a post-delivery phase (co-learning).

Also, this research shows that the segment of students categorized as "medium level of co-creation" offers a great willingness to perform proactive activities during the teaching-learning process; they do not show the same desire to relate in collaborative work with other students or teachers. This is relevant because, as Tarı Kasnakoğlu & Mercan, (2022) point out in their research, as one partner feels more attached and loyal to the other, they activate their resources more effectively, resulting in a higher level of co-creation. So even when they are proactive in different facets, they do not achieve an optimal sharing of co-creation due to their lack of interest in generating academic activities or pedagogical interventions in which they establish links with faculty and colleagues.

One of the main unexpected results of the research is that 20% of the students who were surveyed show a low level of co-creation, which implies that they do not offer a willingness to perform the activities meant in the three dimensions, pro-active learning, relationships with peers and faculty as well as attitude and responsible behavior. However, the level of approval of the surveyed course is 100%, which concerns that students, even

without co-creating, approve their academic classes with grade point averages ranging from 8.5 to 9.5 on a scale of 10.

In agreement with Tarı Kasnakoğlu & Mercan, (2022) this research shows that not all students are ready to be co-creators during the teaching and learning process, even when they achieve passing grades. In addition, Judson & Taylor (2014) critically point out the existence of inflated notes that do not objectively represent the performance of the students, but that take place in HEIs because of marketization and governmental demands to maintain or increase the allocated public budget, the results of this research are consistent with the previous pointing.

An essential caveat for interpreting this study is that it is limited to a specific professional profile and level of education. The results may differ if applied in other professional areas and with students of different levels. On the other hand, all the students surveyed belong to a public university in a specific city in Mexico, so the sociocultural, economic, and political characteristics in other regions and countries may be elements that change the results. Therefore, the authors recommend performing different measurements of co-creation behavior in different environments and scenarios, for example, in private HEIs and other LATAM countries, to identify convergences and divergences.

The present study has identified 3 segments of students with clearly different levels of engagement in value co-creation with the teacher, but it is interesting to also know the profile of the individuals that form each segment. Future research should include the objective of identifying the sociodemographic, psychographic, and attitudinal profiles of students with different commitments to co-creation.

This research indicates that even when university students have satisfactory and outstanding average grades, it does not guarantee their real participation as co-creators of value during academic activities. Therefore, it is possible to confirm the existence of an educational marketization and the bias between the results that are conditioning the budget of the HEIs, with the educational reality of the geographical area of Mexico in which the study was developed. Specifically, knowing the current co-creation behavior of university students, it is possible to identify the areas of opportunity and improvement of student participation, which allows managers and faculty to generate teaching and management

strategies to improve institutional arrangements that help to enhance student behavior as a co-creator of value during the educational experience.

The LATAM HE ecosystem is immersed in a marketization tendency that threatens its sustainability due to the disassociation of current university management from the advances in the service discipline. The university students in the LATAM region, specifically in the public sector, show a co-creation behavior with some areas of opportunity, even when the HEIs demonstrate educational quality indicators based on the retention and graduation of "satisfied" students for the achievement of the government budget, its students do not necessarily show an optimal co-creation behavior proportional to the numerical results of their evaluations and their approval levels.

The complexity and challenges faced by the HE ecosystem demand the integration of the advances of the service sciences to the management of HEIs, linking the discipline of marketing to HE, and generating a new way of seeing and managing teaching-learning since HEIs are immersed in the forces and threats of the market. Still, at the same time, they must maintain their essence and the reason for their existence as pillars of human development.

Seeking to face the challenge, HEIs continue to opt for indiscriminately applying the student-customer and professor-provider of knowledge approach, without considering that this approach may be helpful in the short term since it achieves immediate satisfaction and retention but severely harmful in the long term, by deteriorating the social value of HE per se. Therefore, it is necessary to unlearn outdated marketing theories and approaches applied in HE and to understand that student participation is needed for all aspects of their education, which implies a much broader perspective than traditional forms of interaction.

Therefore, the value co-creation as a premise of the SDL applies to the ecosystem since it provides a renewed framework aiming for an extended and more helpful relationship between students with their classmates and with the faculty, allowing identifying the existing and missing required cognitive and behavioral activities of the student that generate value within the university classrooms, as they contribute to their previous learning experiences, their knowledge, and their general culture.

In addition, HEIs are responsible for the institutional arrangements that enable the organization, course design, and competencies that improve the human and professional capacities of the students. Therefore, HEIs are responsible for establishing a functioning co-

creation ecosystem, considering their objectives in all its dimensions (economic, political, and market) but socially functional in LATAM.

Finally, to better understand the functioning of the educational ecosystem, it is essential to start by identifying how students participate in joint achievement during academic activities, interacting with each other and with teachers, and in their co-creation behavior in general. This can help HE to define better actions that promote value co-creation, from the pre-delivery phase to the post-delivery stage. Therefore, knowing and measuring the level of student involvement through their co-creation behavior is the first step to improving the current functioning of the educational sector in the LATAM region.

CHAPTER V

Considering the value co-creation service ecosystem dynamic (Phase II)

Chapter V: Considering the value co-creation service ecosystem dynamic

5.1 Methodology and research design

This section of the research is focused on answering the SQ2. *What is the influence of the processes, institutional arrangements, and relationships on the value co-creation in the HE service ecosystem?* Trough qualitative research methodology and semi-structured interviews, this study aligns with the HE value co-creation model developed by Dollinger et al. (2018). The model comprises two second-order constructs: Co-production, encompassing three first-order constructs (Knowledge, Equity, and Interaction), and Value-in-use, which includes three first-order constructs as well (Experience, Personalization, and Relationship).

To gather insights from participants, six questions were formulated based on each first-order construct for exploring the perspectives and opinions of the individuals involved. Table 18 outlines the structure and content of the semi-structured interview instrument, providing a clear overview of the questions posed in alignment with the HE value co-creation model.

5.1.1 In-depth interviews

A qualitative research method called in-depth interviews makes it possible to gather comprehensive and insightful data about the experiences, opinions, attitudes, beliefs, and values of the people. Numerous academic fields, including sociology, anthropology, and psychology, among others, have made extensive use of this method (Almeida et al. 2017).

First, the in-depth interview consists of a structured conversation between the researcher and the participant, which aims to obtain detailed and meaningful information about the research topic. An open-ended question is asked, and from there, the participants are allowed to respond with their own words, experiences, and thoughts (Ayala and Elder, 2011). For these reasons, in-depth interviews are an effective way to gather detailed and complex information about research topics that are not easy to measure quantitatively. Nevertheless, it is essential to ensure the rigor of the methodology and be aware of the assumptions of the researcher and perspectives to analyze results (Baker and Charvat, 2016).

Table 18.
Semi-structured interview instrument

Second-order construction	First-order construct	Topic	Question
Co-production	Knowledge	Integration of knowledge, experiences, and resources in academic activities	How does the student integrate their knowledge, experiences, and/or other resources into the value proposition of Higher Education?
	Equity	Equal access to the value proposition of Higher Education	Does the student have equal access to the development and design of the Higher Education value proposition?
	Interaction	Importance of interaction between students and institutional and academic actors	What is the quality of the interactions between the student and the Higher Education institution to integrate resources and co-create the value proposition?
Value-in-use	Experience	Impact of value co-creation on student experiences	How does value co-creation impact student experiences within Higher Education?
	Personalization	of Higher Education value propositions by students	To what extent can students personalize their Higher Education value propositions?
	Relationship	Impact of value co-creation on student relationships	How does value co-creation impact student relationships with their Higher Education institution?

Source: Own elaboration based on Dollinger et al. (2018)

5.1.2 Participants and interview resources

Purposive sampling, according to Campbell et al. (2020) is a sampling in which participants are specifically chosen to represent particular traits of the community. When the researcher wants to choose volunteers with certain qualities pertinent to the study at hand, such, for example, experience in a particular field or specific knowledge, they utilize this strategy. As it enables the researcher to carefully choose individuals who can provide rich and thorough

information about the phenomenon under study, purposeful sampling can be helpful in qualitative studies.

A total of 18 interviews were conducted between January 20 and March 15, 2022, covering a variety of educational and professional perspectives. These interviews included the participation of two students, two professors, and two university tutors from the marketing degree program in a public HEIs in Mexico. Two representatives of educational quality assessment agencies, one representative of local government, one parent, two representatives of non-profit organizations, two alumni, two public technology and research organizations, and two employers were also interviewed.

Those interactions were carried out both in person at the workplaces of the participants and virtually through the Zoom platform. To facilitate these meetings, the resources of the researchers were used, either to meet in person with the interviewees or to connect online using the computer equipment of the researcher. Table 19 presents the inclusion criteria and the profiles of the interviewees. The interviews are recorded with the authorization of the interviewees to later carry out a process of transcription and analysis of all the information obtained. The interview process was carried out with the due authorization of the participants and was recorded in audio format to ensure the accuracy of the information gathered. Subsequently, the contents obtained during these interviews were transcribed and thoroughly analyzed as part of the research process. Appendix 01 contains a verbatim transcript of the 18 interviews.

Table 19.
Ecosystem actors interviewed profile

Num.	Actors	Gender	Profile description
01	Student 01	W	Undergraduate student in business at a public university, in her last academic year.
02	Student 02	M	Undergraduate student in finances at a public university, in his last academic year.
03	Faculty 01	M	Professor with 20 years of experience in HE, teaching in different educational programs in the public and private sectors at the undergraduate and graduate levels.
04	Faculty 02	M	Professor with 16 years of experience in HE, teaching in different educational programs in the public and private sectors at the undergraduate and graduate levels.
05	Accrediting Agencies Representative 01	W	Quality evaluator in HEIs at the national and international levels for more than 10 years.
06	Accrediting Agencies Representative 02	W	Quality evaluator in HEIs at national and international levels for more than 6 years.
07	Local public administration	W	A public official of the Secretaría de Educación Pública of the State of Hidalgo, with 12 years of experience in the position.
08	Relative to the student	W	Parents with sons and daughters in college
09	University council 01	W	Coordinator of the undergraduate program in foreign trade and group and individual tutor for undergraduate students
10	University council 02	M	General coordinator of the tutoring and counseling system at the undergraduate level.
11	Non-Profit Organizations 01	W	NGO representative with more than 15 years in charge of general management, generating projects with universities for social benefit.
12	Non-Profit Organizations 02	M	NGO representative with more than 5 years in charge of general management, generating social projects regarding special needs childhood.
13	Alumni 01	M	A university graduate who develops professionally in the following disciplinary fields
14	Alumni 02	W	A university graduate who develops professionally in the following disciplinary fields
15	Public technology and research organizations 01	M	Representative of CITNOVA, a public organization that connects science with technology.
16	Public technology and research organizations 02	W	Representative of CITNOVA, a public organization that connects science with technology.
17	Employer 01	W	Employer of university graduates in her own company and in the network of entrepreneurs to which she belongs as an active member.
18	Employer 02	W	Employer of university graduates in her own company and in the network of entrepreneurs to which she belongs as an active member.

Source: Own elaboration

5.2 Results

The following are the results of research phase II, which answer the following question SQ2: *What is the influence of processes, institutional arrangements, and relationships on the HE value co-creation service ecosystem?* Through identifying the influence of processes, institutional arrangements, and relationships, through the exploration of the perspective of the actors on the implementation and operationalization of co-production and value in use, in the service ecosystem.

The results of this research are based on Dollinger et al. (2018) HE value co-creation model. In the said model, two key dimensions (or second-order constructs) are established, such as co-production, which is broken down into three items; equality, interaction, and knowledge, as well as value in use, which addresses three items more related to experience, personalization, and relationships. To carry out this research, six specific questions were developed, designed to obtain the perspective of the different actors involved in each of the aforementioned dimensions.

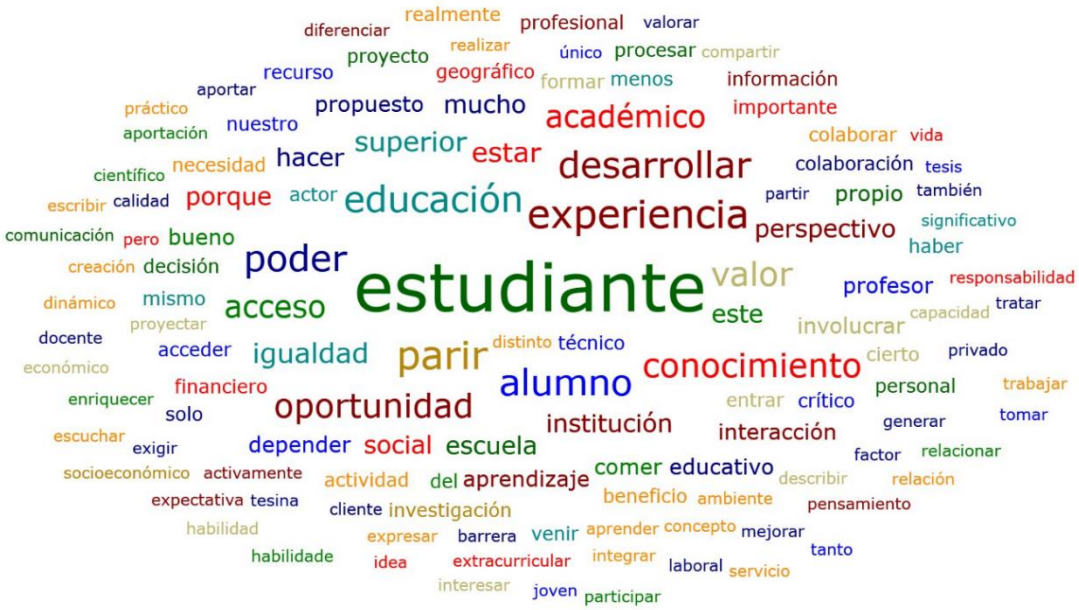
5.2.1. Second-order construct analysis and results

5.2.1.1 Co-production

In general, the responses of the interviewees show that the co-production of value in the HE service ecosystem is a complex process that involves the active participation of students, the influence of the institution, and the quality of the interaction between all actors. Despite convergences in the importance of these elements, challenges, and differences in the way these processes are addressed and facilitated are also highlighted.

Collaboration between students, faculty, and the institution is considered critical to achieving an enriched value proposition tailored to the needs of students and the world of work. In addition, the need to address equity in access to value co-production opportunities in the ecosystem is highlighted. Figure two displays the word cloud representative of the interviews of the actors.

Figure 2.
Co-production word cloud



Source: authors, based on ATLAS.ti 9 results.

1. Knowledge

Interviewees offer diverse perspectives on how students integrate their knowledge, experiences, and resources into the HE value proposition. In general, there is convergence on the importance of this integration, but divergences are also highlighted in terms of how it is achieved and the challenges it faces. One common thread is the notion that students play a crucial role in the integration of knowledge and experience during academic activities. It is recognized that HE is not just about acquiring theoretical knowledge, but also about applying it in real situations. This is seen as essential for the integral development of students and to prepare them for the world of work.

However, there are also divergent responses. Some interviewees emphasize the importance of psychology and student engagement, arguing that students are often not sufficiently engaged in knowledge integration and that psychological work is needed to foster that engagement. Others mention the need for effective communication between students and the institution to ensure a clear understanding of the value proposition.

In addition, the influence of the institution on the ability of the students to integrate knowledge and experiences is highlighted. Some interviewees mention that this depends on the vocation and mission of the institution, as well as the relationships and agreements it has with other entities. The offer of research, mobility, and scholarship programs is also considered relevant.

It is generally recognized that effective integration of knowledge and experience is essential during academic activities, but there are challenges and differences in the way this process is approached and facilitated. Collaboration between students, faculty, and the institution is critical to achieving an enriched value proposition tailored to the needs of students and the world of work. Finally, the answers of the respondents reveal the importance of students playing an active role in constructing their knowledge and applying their experiences, highlighting the challenges such as lack of engagement, variability across institutions

2. Equity

In the analysis of the responses of the interviewees on how students integrate their knowledge, experiences, and other resources into the value proposition, several convergences and divergences can be identified. In terms of convergences, most interviewees recognize the importance of students actively participating in the construction of their knowledge, emphasizing that students should apply what they learn in real situations, relate it to their personal and professional experiences, and use it to solve real-world problems. In addition, most of the interviewees emphasize that HE should not be limited to the acquisition of theoretical knowledge but should also focus on the development of practical skills.

However, there are also divergent responses. For instance, some interviewees mention that students often lack commitment and do not effectively integrate their knowledge due to a lack of motivation and psychological guidance. Others suggest that knowledge integration depends largely on the educational institution and its resources, as well as the vocation of the university, indicating that not all institutions offer the same opportunities for students to integrate their knowledge and experiences. In addition, some interviewees address the issue of measuring academic performance, noting that traditional metrics do not adequately reflect the ability of the students to apply their knowledge in the work

environment, suggesting a discrepancy between academic expectations and labor market needs. In addition, the importance of equal access to education and the need to eliminate socioeconomic barriers is strongly highlighted.

3. Interaction

Interviewees offer a variety of perspectives on the quality of interactions between students and institutions concerning the co-creation of value. In general, they agree that these interactions are crucial to enhancing the educational experience. In the first group of interviewees, the importance of students being active in their learning process and collaborating with professors and administrators is emphasized. The idea that students are not simply passive recipients of knowledge, but active participants in the creation of value, is a common point, being the interaction with faculty an opportunity to challenge and enrich education.

Nevertheless, other comments emphasize the need for students to demand new pedagogical techniques and approaches. Co-creation of value is seen as a multidirectional process in which students must be proactive in the pursuit of a more relevant and personalized education. In this sense, the importance of communication and empathy are also mentioned in several comments. The relationship between students, faculty, and administrators is seen as crucial to ensure that information and resources reach students effectively. Although there are divergences in the details, most interviewees agree that interaction between students, institutions, and professors is essential for the co-creation of value.

5.2.1.2 Value-in-use

The three sub-variables of "value in use" (experience, personalization, and relationship) provide insight into the dynamics of HEIs. Most of the interviewees agreed that co-creation of value significantly enhances the educational experiences of the students, boosting their motivation and confidence by actively participating in knowledge creation. Also, they perceive several limitations regarding the educational experience personalization, especially in academic activities, but mention that regarding extracurricular activities, they perceive more flexibility according to individual interests.

The impact of value co-creation on student-institution relationships is seen as strongly complex, and the interviewees consider that requires effective institutional support, as well as collaboration between institutions and employers, to understand and face the context challenges. Figure three displays the word cloud representative of the interviews of the actors.

Figure 3.
Value-in-use word cloud

Source: authors, based on ATLAS.ti 9 results.

1. Experience

The responses provided by the interviewees show a clear perception that value co-creation has a significant impact on the experience of the students. Firstly, it is highlighted that this co-creation empowers students by enabling them to actively take ownership of knowledge and create it. This increases their motivation, confidence, and comfort in their skills and knowledge, which in turn boosts their academic performance and readiness for the world of work.

Second, it highlights the importance of the active participation of the students in their education. When students contribute to defining their educational experience, they feel more

engaged and connected to the institution. This leads to a more meaningful educational experience and the acquisition of practical skills aligned with their personal and professional goals. In addition, the relevance of ethics and moral HE values, is mentioned, suggesting that value co-creation is not only about knowledge but also about instilling ethical and moral principles in students.

Finally, there is variability in the implementation of value co-creation in different HEIs, both public and private. Some institutions are more focused on fostering this practice, while others lack it. This highlights the need for institutions to provide students with the tools and opportunities to effectively participate in the co-creation of value in their education. In summary, value co-creation appears to have a positive impact on the student experience in HE, but its implementation may vary by institution.

2. Personalization

The answers to the question about the extent to which students can personalize their value propositions in HE reveal convergences and divergences in the opinions of the interviewees. On the one hand, some interviewees express that personalization of the value proposition is limited, and mostly reduced to extracurricular aspects. Their opinion is that students have some freedom in choosing additional activities, but not in modifying the educational proposal itself. This limitation could discourage students from participating in the co-creation of their educational experience.

On the other hand, several interviewees emphasize the importance of personalization in the educational journey. They argue that students should have the flexibility to choose courses, projects, or approaches that suit their interests and goals. They see this as essential for HE not to be "one size fits all" and for the experience to be more valuable and meaningful. In addition, some interviewees mention that personalization may vary by institution and program, suggesting that the availability of options may depend on external factors. While some see limitations, others argue for the importance of providing students with the flexibility to tailor their educational experience to their individual needs and goals.

3. Relationship

The responses provided by interviewees reveal several key points about how value co-creation impacts the relationships of the students with their HEIs. First, it is mentioned that value co-creation can create challenges and confusion for students. Some students may feel demotivated or overwhelmed by the new dynamic in which they are encouraged to be participatory in creating knowledge and tailoring education to their individual needs. This transition can generate tensions and demands that institutions are sometimes unprepared to address.

On the other hand, the interviews highlight the importance of collaboration between educational institutions and employers, because they consider that the students may benefit greatly from interacting with professionals in the classroom, which provides them with a clearer understanding of the demands of the labor market. In addition, when graduates have a positive and relevant experience in the world of work, they speak well of their institutions, which can enhance the reputation of the institution and its attractiveness to future students.

In addition, the quality of teaching and the relationship with faculty are also mentioned as critical factors. The way faculty design learning environments and their pedagogical approach may greatly influence the student experience, generating effective learning environments and fostering value co-creation, resulting in a positive impact on student learning. It is noted that the interviewees consider that value co-creation does not take place in the same way in all educational institutions.

Most of the interviewed, consider that the structure and culture of the institution, as well as the quality of the faculty, play a crucial role in the way this concept is implemented, mentioning that faculty evaluations should include aspects related to the co-creation of value, not only the quality of teaching. The importance of the maturity and adaptability of students is also highlighted because most of the interviewees consider that value co-creation should be a two-way process in which both students and institutions contribute to mutual improvement. Table 20 shows the perspective of the actors, regarding co-production and value in use in the service ecosystem.

5.2.2 Processes, institutional arrangements, and relationships that influence the value generation of the service ecosystem.

The following is a summary of the ideas on which the interviewees agree as the main influences of processes, institutional arrangements, and relationships in the co-creation of value in the ecosystem.

Knowledge

- Students play a crucial role in integrating knowledge and experiences into the HE value proposition.
- There is a consensus that HE should not only focus on theoretical knowledge but also its practical application.
- The vocation, mission of the institutions, and relationships with other entities may influence the integration of knowledge and experiences.
- Challenges include the engagement of the students, the need for effective communication, and variability in how institutions approach knowledge integration.

Equity

- Challenges include the lack of commitment of the students, varying opportunities across institutions, and the need to reassess academic metrics to reflect real-world readiness.
- The socioeconomic barriers to accessing HE are highlighted, emphasizing the importance of equal opportunities.

Interaction

- Quality interactions between students and institutions are crucial for enhancing the educational experience.
- Students are seen as active participants in the co-creation of value, challenging, and enriching education.
- Communication, empathy, and equal access are essential elements of these interactions.
- Active student participation, adaptation to new pedagogical techniques, and equal opportunities are recurring themes.

Experience

- Value co-creation empowers students, increasing motivation, confidence, and readiness for the workforce.
- Active student participation and the instillation of ethical and moral values are emphasized.
- Variability in the implementation of value co-creation across institutions highlights the need for standardization.

Personalization

- Opinions on personalization vary, with some seeing limitations and others advocating flexibility in course selection and approaches.
- The importance of personalization varies by institution and program, indicating the influence of external factors.

Relationship

- Value co-creation can create challenges for students, but collaboration between institutions and employers can provide valuable experiences.
- Teaching quality and the design of learning environments influence the student experience.
- The structure of the institutions, the local culture, and faculty quality play a crucial role in value co-creation.

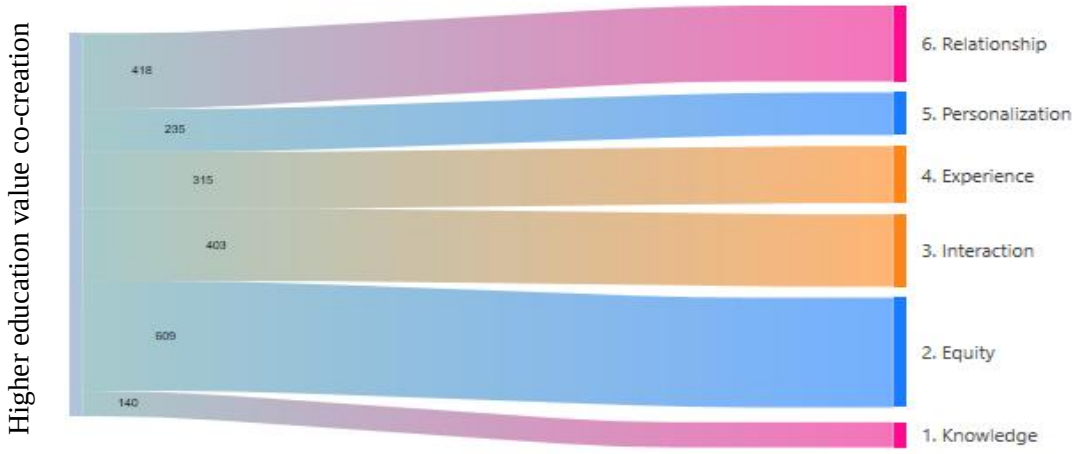
Table 20 shows the synthesis of the responses of the ecosystem actors interviewed, showing their perspective on the elements that influence the co-creation of value in the educational ecosystem under study. Furthermore, Figure 4 shows the convergence of patterns derived from in-depth interviews conducted for each item within every dimension of the model of Dollinger et al. (2018). In this diagram, the size of the colored bars reflects the frequency of keywords related to the two main dimensions. Hence, it facilitates the analysis of the perceptions of the actors regarding the implementation and operationalization of co-production and value-in-use within the service ecosystem. By examining the alignment of these keywords, it is possible to ascertain the importance actors attribute to them in the processes, institutional arrangements, and relationships influencing value generation within the ecosystem.

Table 20.
Perspective of the actors regarding co-production and value in use in the service ecosystem

Construct	Second-order construct	First-order construct	Main perspectives of the actors
Value co-creation in the service ecosystem	Co-production	Knowledge	▪ Integration of previous knowledge ▪ Practical applications ▪ Institutional support ▪ Engagement of the students
		Equity	▪ Academic metrics ▪ Socioeconomic barriers
		Interaction	▪ Quality interactions ▪ Active participation of the actors ▪ Communication, empathy, and equality of access ▪ Adaptation to new pedagogical techniques
	Value in use	Experience	▪ Student´s empowerment, motivation, and confidence ▪ Ethical and moral values ▪ Standardization
		Personalization	▪ Flexibility in course selection ▪ External factors influence
		Relationship	▪ Collaboration between institutions and actors ▪ Teaching quality ▪ Design of learning environments ▪ Maturity and adaptability of students

Source: Own elaboration

Figure 4.
Convergence of the patterns

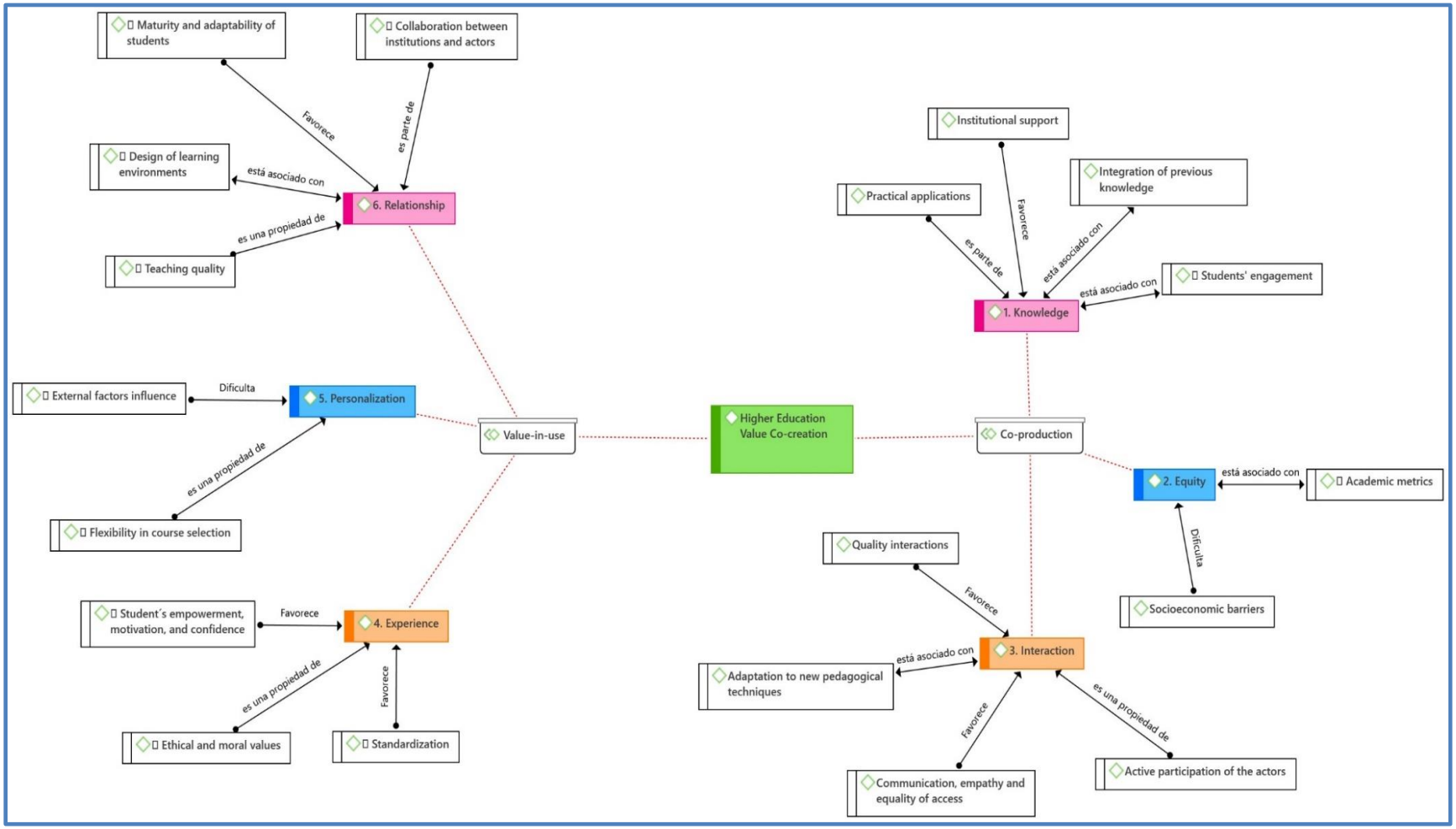


Source: authors, based on ATLAS.ti 9 results.

Finally, Figure 5 illustrates the relation between emerging patterns and the items and dimensions of the foundational model employed as an interview instrument. Through this network of relationships, it becomes feasible to gain insight into how the perspectives of the interviewed actors are shaped by the interplay of processes, institutional arrangements, and relationships, thereby influencing the value generation within the studied service ecosystem.

Value creation in a service system encompasses processes, institutional arrangements, and relationships. Collaboration for knowledge creation is essential, incorporating prior knowledge, practical applications, institutional support, and active student participation. Equity plays a significant role, influenced by academic metrics and socioeconomic barriers affecting knowledge sharing. Interactions within the system are vital, emphasizing quality interactions, active actor participation, effective communication, empathy, and equal access. All these things together contribute to the dynamic of the HE value cocreation.

Figure 5.
Network of codes and quotations



Source: authors, based on ATLAS.ti 9 results

5.3 Conclusions of the research phase

In addressing the dynamics of value co-creation in the service ecosystem in the context of HE, this research strives to provide a comprehensive understanding of the influence exerted by processes, institutional arrangements, and relationships. The exploration is guided by the question SQ2: *What is the influence of these elements on the co-creation of value in the HE service ecosystem?*

To delve deeper into this research, a qualitative research methodology has been meticulously designed, using semi-structured interviews as the main tool for data collection. The study is based on the model of co-creation of value in HE formulated by Dollinger et al. (2018), which encompasses two second-order constructs: Co-production (comprising Knowledge, Equity, and Interaction) and Value-in-Use (comprising Experience, Personalization, and Relationship).

Regarding, Co-production: Knowledge, Equity, and Interaction, the findings highlight the intricate nature of knowledge integration, highlighting the crucial role of students in actively incorporating knowledge and experiences into the value proposition of HE. Despite a consensus on the importance of practical application alongside theoretical knowledge, challenges such as student engagement, effective communication, and institutional variability in approach are evident.

In addition, Collaboration between students, faculty, and the institution is considered fundamental for an enriched value proposition tailored to the needs of students and the labor market. Equity is emphasized, stressing the need for equal opportunities and the active participation of students in the construction of their knowledge. The quality of interactions, where students are seen as active contributors to the co-creation of value, is identified as an essential element.

In the value-in-use realm, value co-creation significantly impacts educational experiences, motivating and empowering them by actively engaging them in knowledge creation. However, challenges are noted, including the possibility of demotivation or confusion among students. The importance of collaboration between educational institutions and employers is highlighted, contributing to the understanding of the students about the demands of the labor market. The quality of teaching, the design of the learning environment,

and the relationship between teachers and students are considered critical factors. The variability in the implementation of value co-creation between institutions highlights the need for standardization.

In summary, the examination of factors influencing value generation in the HE service ecosystem, based on Dollinger et al. (2018) model, reveals complex dynamics within co-production and value-in-use dimensions. The findings emphasize the important role of students in integrating knowledge and experiences, highlighting challenges like student engagement, effective communication, and institutional variability. Collaboration is underscored as fundamental, emphasizing equal opportunities and active student participation. Moving to value-in-use, the research highlights the profound impact of co-creation on students, motivating and empowering them, while also acknowledging challenges such as potential demotivation. Finally, critical factors include teaching quality, learning environment design, and the teacher-student relationship, with observed variability emphasizing the need for standardization to optimize HE value propositions.

CHAPTER VI

Determining the cognitive and behavioral activities of the students to co-create value (Phase III)

Chapter VI: Determining the cognitive and behavioral activities of the students to co-create value

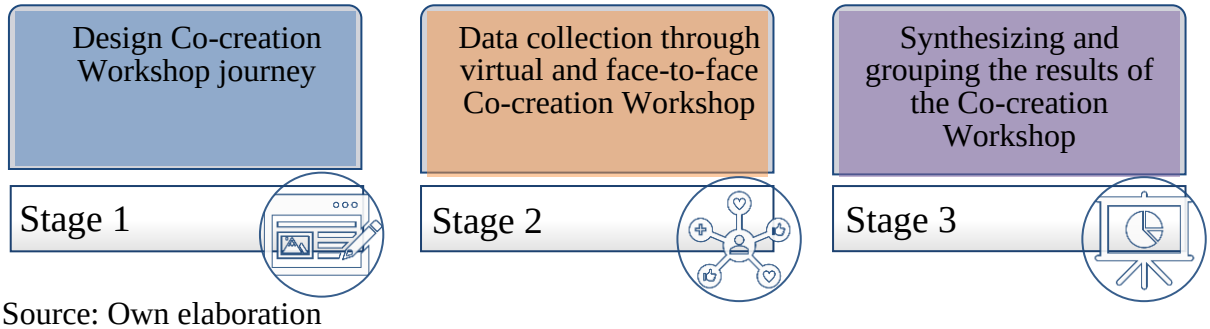
6.1 Methodology and Research Design

This section of the research is focused on answering the SQ3. *What cognitive and behavioral activities do service ecosystem actors consider of the HE value co-creation student participation as a co-creator?* This study applies the Living lab methodology to develop co-creation workshops (Hossain et al. 2019) which allows for observation and narrative recording and helps to identify and contextualize the real nature of the subject through constructive analysis, integrating other actors with co-creation initiatives (Knickel and Knickel, 2018).

6.1.1 Co-creation Workshop Design

The methodology of co-creation workshops typically involves a series of interactive sessions, usually facilitated by a neutral third party, where participants engage in a structured process of ideation, prototyping, testing, and refining solutions (Purcell et al. 2019). Co-creation workshops offer multiple advantages in integrating ecosystem actors. They promote collaboration and shared ownership, generating effective communication and knowledge-sharing, and provide a structured process for generating and testing new ideas and solutions, as illustrated in Figure 6 outlining the general process stages.

Figure 6.
Stages of the general process of Co-creation Workshops



Source: Own elaboration

6.1.1.1 Stage 1: Design Co-creation Workshop Journey

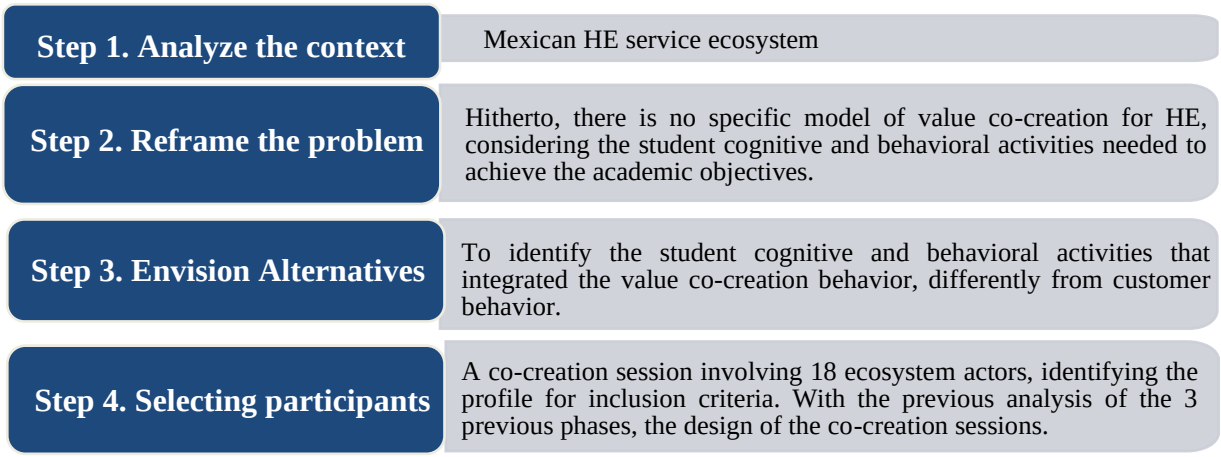
The first stage is to design the Co-creation Workshop journey, based on the SISCODE Toolbox methodology applied, as an open methodology for academic purposes and seeks to facilitate the design. For a better understanding and prioritization of the particularities of the Mexican context, the methodology is adapted to the regional ecosystem, through 4 specific steps, shown in Figure 7.

The journey is designed in two parts, the first one is a virtual one, and the second one is a face-to-face session, both modalities follow the UNaLab European Network of Living labs (ENoLL) guideline, which consists of 5 phases (Ecosystem challenge, Ideation, Strategy, Validation, Feedback). The description of the 15 participants in both workshop modalities is shown in Table 21, and Table 22 presents the description of each of the phases and the activities that are developed, both in the virtual and face-to-face co-creation sessions.

The virtual co-creation session, utilizing "Trello Platform" and “Jamboard,” occurs asynchronously from March 20th to April 14th, 2023. Subsequently, an in-person co-creation session with the same participants in the HE service ecosystem takes place on April 24th, 2023. Both virtual and face-to-face sessions follow the principles of Design Thinking, Co-Creation Collective Intelligence, and Co-creation Work methodologies across five phases, detailed in Table 23. Also, Appendix 02 contains images of the operation of both modalities.

Figure 7.

SISCODE Toolbox methodology to design the Co-creation Workshop journey



Source: Own elaboration based on SISCODE Toolbox (2019)

Table 21.
Profile of ecosystem actors who participated in the Workshops

Num.	Actors	Gender	Profile description
01	Student 01	W	Undergraduate student in marketing at a public university, in her last academic year.
02	Student 02	M	Undergraduate student in education at a public university, in his last academic year.
03	Faculty 01	H	Professor with 18 years of experience in HE, teaching in different educational programs in the public and private sectors at the undergraduate and graduate levels.
04	Faculty 02	M	Professor with 12 years of experience in HE, teaching in different educational programs in the public and private sectors at the undergraduate and graduate levels.
05	Academic Counsel	M	Academic Coordinator and Undergraduate Tutor
06	Science education expert	M	Ph.D. in education, head of the higher education department of a public university.
07	Accrediting Agencies Representative 01	W	Quality evaluator in HEIs at the national and international levels for more than 10 years.
08	Accrediting Agencies Representative 02	W	Quality evaluator in HEIs at national and international levels for more than 6 years.
09	Local government	W	Representative of CITNOVA, a public regulatory body, and promoter of science and technology with education.
10	Academic tutor 01	W	Coordinator of the undergraduate program in foreign trade and group and individual tutor for undergraduate students
11	Academic tutor 01	M	General coordinator of the tutoring and counseling system at the undergraduate level.
12	Non-Profit Organizations 01	W	NGO representative with more than 15 years in charge of general management, generating projects with universities for social benefit.
13	Non-Profit Organizations 02	M	NGO representative with more than 5 years in charge of general management, generating social projects regarding special needs childhood.
14	Employer 01	H	Employer of university graduates in his own company and in the network of entrepreneurs to which she belongs as an active member.
15	Employer 02	W	Employer of university graduates in her own company and in the network of entrepreneurs to which she belongs as an active member.

Source: Own elaboration

Table 22.
Phases of the Co-creation sessions in Living labs

Phase	Description
1. Ecosystem challenge	The ecosystem actors identify the challenge of the ecosystem to integrate the student in the generation of value of HE, prioritizing learning and not only their satisfaction in the short term.
2. Ideation	The ecosystem actors generate different ideas to face the identified challenge.
3. Strategy	The ecosystem actors develop strategies to implement the ideas proposed above.
4. Validation	The ecosystem actors validate, based on their knowledge and participation in the HE ecosystem, the different strategies proposed.
5. Feedback	The ecosystem actors provide feedback on the validation obtained.

Source: Own elaboration base don UNaLab European Network of Living labs (ENoLL)

Table 23.
Face-to-face co-creation session methodologies

Methodology	Description
Design Thinking	A user-centered methodology is used to address complex problems and foster innovation. It involves the collaboration of a multidisciplinary team to identify user needs and desires, generate creative ideas, prototype solutions, and test iteratively. This tool promotes empathy, experimentation, and a focus on practical solutions.
Co-Creación Collective Intelligence	Collective co-creation intelligence refers to the ability of a diverse group of individuals to collaborate and generate ideas, solutions, or knowledge together. This tool leverages collective knowledge and the diversity of experiences and perspectives to address complex problems or challenges. It can be carried out in virtual or face-to-face environments and is based on the premise that collective intelligence surpasses that of any one individual.
Co-Creación Work	A collaborative session specifically designed to bring a group of people together to jointly generate ideas or solutions. These workshops can vary in length and format but typically include activities such as brainstorming, prototyping, and ongoing feedback. Co-creation workshops encourage participant participation and can be used in a wide range of contexts.

Source: Own elaboration

6.1.1.2 Step 2: Data collection through virtual and face-to-face Co-creation Workshops

To obtain the information through the co-creation sessions, both virtual and face-to-face, co-creation activities were applied during 10 different tools, five in the virtual session, which are presented in Table 24, and five more activities during the face-to-face, as aforementioned data is observable in Table 25. The result of these activities is collected from the products resulting from them, as well as from work and observation logs.

Table 24.
Virtual Co-creation Workshop activities

Methodology	Activity	Description
Design Thinking	"My role in the ecosystem"	Participants describe the main characteristics of their work and academic activities to share with everyone their role in the ecosystem.
	"Cognitive activities"	Participants identify, from their role and needs, the cognitive activities that students should carry out during their participation in academic and learning activities to be co-creators.
	"Behavioral activities"	Participants identify, from their role and needs, the behavioral activities that students should carry out during their participation in academic and learning activities to be co-creators.
Co-Creación Collective Intelligence	"Empathy timeline with cognitive activities"	In an empathy activity, actors identify cognitive activities identified by other actors, which are part of the co-creation behavior of university students, to define them from their perspective and expertise.
	"Empathy timeline with behavioral activities"	In an empathy activity, actors identify behavioral activities identified by other actors, which are part of the co-creation behavior of university students, to define them from their perspective and expertise.

Source: Own elaboration

Table 25.
Face-to-face Co-creation Workshop activities

Methodology	Tools	Description
Design Thinking	"Empathy timeline"	It consists of creating a timeline that represents the journey or experience of the users, from the beginning to the conclusion of an activity or process. Participants identify the points of contact with the user and the associated emotions at each stage.
	"Future Newspaper"	A creative tool that allows teams to imagine what a news or newspaper article would look like in an ideal future. Participants create headlines, images, and content related to a specific topic, such as a product, service, or innovative idea. This tool encourages reflection on future possibilities and opportunities, which can help inspire the generation of innovative ideas.
Co-Creación Collective Intelligence	"Sensing Strategies Canvas"	A creative tool that allows teams to imagine what a newspaper story would look like in an ideal future. Participants create headlines, images, and content related to a specific topic. This tool encourages reflection on future possibilities and opportunities, which can help inspire the generation of innovative ideas.
	"Traffic Light"	It uses a color system similar to a traffic light: green for go, yellow for caution, and red for stop. Participants can use this tool to evaluate the progress of an idea or project and make decisions based on its current status.
	"Feedback Mailbox"	A tool that facilitates the collection of comments and feedback in a structured manner. A physical or virtual "mailbox" is created where people can deposit their suggestions, opinions, or ideas on a specific topic. This encourages participation and allows the collection of valuable perspectives that can be used in co-creation or continuous improvement processes.

Source: Own elaboration based on the UNaLab European Network of Living labs (ENoLL)

6.1.1.3 Step 3: Synthesizing and grouping the results of Co-creation Workshops

In this step, the research records that collect the results during the sessions of the above-mentioned co-creation tools and the techniques for their analysis allow the content analysis based on data provided from the development of each tool and the observation of the interaction between the actors in the development of the Co-creation Workshop. This analysis includes in detail, among other things; observations, ideas, and data, on the actions carried out for the development of the fieldwork. Both sessions are consecutive and interrelated, based on The European Network of Living labs (ENoLL). Finally, Table 26 presents schematically developed co-creation sessions, both in their virtual and face-to-face modality.

Table 26.
Co-creation sessions design

Co-creation sessions					
Co-creation session structure	**Ecosystem challenge**	**Ideation**	**Proposition**	**Validation**	**Feedback**
	Explore HE service ecosystem	Identify valuable insights, and generate a brainstorming	Develop specific proposals	Validating the proposals	Evaluate and feedbacking on the proposals of the actors
Method	Design Thinking		Co-creation Collective Intelligence		Co-creation work
Face -to-face Co-creation Tools	Empathy timeline	Future Newspaper	Sensing strategies Canvas	Traffic Light	Feedback Mailbox
Virtual Co-creations session	My role in the ecosystem	Cognitive activities Behavioral activities	Cognitive activities Behavioral activities	Empathy timeline	Empathy timeline with cognitive and behavioral activities

Source: Own elaboration based on the Living lab methodology.

6.2 Results

This section seeks to answer SQ4. *What cognitive and behavioral activities do service ecosystem actors consider of the value co-creation student participation as a co-creator?* Through integrating the knowledge and experience of the actors involved in academic and management activities, through a virtual and face-to-face co-creation workshop with some ecosystem actors, including the students, to identify the cognitive and behavioral activities needed and expected during academic activities to co-create value.

6.2.1 Co-creation Workshops results

6.2.1.1 Virtual co-creation session results

Taking into account the description of the 5 activities indicated above in Table 24, the results obtained from each of them are described below. The activities focused on exploring essential roles and characteristics within the Higher Education (HE) service ecosystem, were carried out on the “Trello platform” for collaborative work. Participants highlighted their academic achievements, and key skills such as creativity and problem-solving, and detailed significant experiences in education.

Behavioral activities were proposed for undergraduates, highlighting the importance of contextualized actions and collaboration in teams. Regarding cognitive activities, crucial behaviors were identified, such as classroom participation, and processes such as adaptability, critical thinking, and creativity were highlighted. In addition, in the co-creation activities, participants defined and contextualized behavioral and cognitive activities, offering valuable insights for the effective management of collaborative learning in the HE environment. Considering the description of the 5 activities indicated above in Table 24, the results obtained from each of them are described below.

Activity 1 results.“My role in the HE service ecosystem”

The first activity shows the purpose of the resolution of 3 personal questions with the possibility to focus on the specific topic of the research. For the question "Who am I?", the 11 actors who answered, all emphasized in the first instance their academic degree in detail

or their highest level so far, some of the actors further specified their work-related activities and the others also mentioned their most personal likes and dislikes.

Regarding "my skills", most of the actors share skills, among which are mainly creativity and problem-solving, with which it is possible to realize that the selected actors are of great help in generating solutions for the problems raised in the subsequent activities. "My role in education", in this element each of the participants mentions their experience in detail and only focuses on the role that corresponds to them, the achievements within their work are mentioned, and it also highlights the experience of Higher Education Institutions (HEIs) evaluators and faculty which exceeds 10 years, so they prove to be suitable for the required activity since they have faced firsthand the problems raised.

Activity 2 results. Student behavioral activities

In this case, participants were asked to propose behavioral activities necessary for university students, and half of them agreed that the execution of actions based on real context should be the basis for these activities to be useful and generate good results. Another widely commented and highlighted proposal is the integration of students in teams, to foster collaboration in the analysis of problems and the generation of ideas for conflict resolution.

In addition to the activities mentioned above, two key behaviors that college students must exhibit are the ability to manage their time effectively and the ability to communicate clearly and effectively and to balance academic, social, and personal demands, which will allow them to meet deadlines and commitments efficiently. The participants mentioned that effective communication is essential in university settings, as it promotes a fluid and constructive exchange of ideas, thus facilitating collaboration and learning among peers and professors. These behavioral skills, along with those already mentioned, are highlighted by the participants as crucial to the academic and personal success of college students. Table 27 shows the four behavioral activities mentioned above.

Activity 3 results. Student cognitive activities

From the responses of the participants, the following are identified four key behavioral activities among college students: classroom participation, adaptability, critical thinking, and

creativity. First, classroom participation is essential, by engaging in discussions, asking questions, and collaborating with peers to understand topics and develop communication skills that will be useful in their future work life. Also, the participants highlighted four cognitive activities that are crucial for the university instruction-learning of the students; adaptability, critical thinking, participation, and creativity. The ability to adapt is seen as essential because it enables students to effectively meet the challenges of rapidly changing academic and professional environments, fostering the capacity for ongoing learning and problem-solving in a variety of contexts.

Critical thinking, on the other hand, stands out for its ability to analyze, assess, and question information in a reflective manner, fostering in-depth understanding and the adoption of informed decisions. Table 27 shows the four cognitive activities mentioned above.

Table 27.
Specific activities proposed by actors

Student Activities	Specific activities proposed
Behavioral activities	Implementation of actions based on real context
	Integration of students in teams
	Manage their time effectively
	Communicate clearly and effectively
Cognitive activities	Participation (engaging in discussions, asking questions, and collaborating with peers)
	Adaptability to the actual environment
	Critical thinking
	Creativity to face challenges

Source: Own elaboration based on the Virtual co-creation session results

Activity 4 and 5 results. Co-creation behavior (behavioral and cognitive activities)

This activity is based on the resolution of one question by the actors: From my role within the HE ecosystem, *How would you define the following student behavioral and cognitive activity during your learning experience?* In addition, between co-creation work, the actors rename each of the cognitive and behavioral activities for effective management and

understanding. The responses by actors as a result of the session are shown below, Table 28, shows the definition of the behavioral activities by the participating actors, while Table 29 shows the cognitive ones. Finally, Appendix 02 shows some pictures as evidence of the platform co-creation activities

Behavioral activities

- **Contextual action implementation:** The actors agree on the need to practically apply acquired knowledge and transfer theoretical understanding. However, they diverge in particular emphases: students regarding the application of knowledge in the classroom, while employers and non-profit organizations emphasize its use to address specific challenges. Tutors and science education experts prioritize the relevance of the information acquired while accrediting agencies focus on the ability to transfer theoretical understanding to specific problems.
- **Teamwork:** The definitions of teamwork and collaboration among the different actors involved in student training and development show convergences in the importance attributed to collaboration, the contribution of skills and knowledge to the group, and the constructive resolution of conflicts. However, there are divergences in terms of focus and specific aspects highlighted, some actors emphasize the achievement of common goals and group effectiveness, while others highlight the diversity of perspectives and skills.
- **Time management:** Planning, prioritization, and meeting deadlines are aspects on which the actors agree on their importance. All recognize the need to organize and manage time effectively to achieve objectives. However, there is disagreement regarding which specific techniques are considered most effective and how they are applied in different contexts. For example, students may prefer maintaining a balance between their personal and academic lives, while employers highlight the ability to plan and maintain a high level of productivity
- **Clear communication:** All recognize the need to express ideas clearly and understandably, as well as the importance of communicating persuasively to achieve specific objectives while adapting to the audience and context. However, while students focus on clarity and conciseness, tutors and nonprofits emphasize collaboration and relationship building. Science education experts emphasize consistency, while employers

stress adaptability and persuasiveness. In addition, accrediting agencies and local government add elements of empathy and constructive conflict resolution.

Cognitive activities

- **Participation:** There is a consensus among the actors in recognizing it as an active and fundamental action for the educational process and personal development. However, while students and tutors define it in terms of involvement in classes, group discussions, and extracurricular activities, the science education expert and the accreditation agency broaden this notion to include participation in learning processes. On the other hand, the local government and nonprofit organizations further extend the scope of participation to encompass community activities and public service projects.
- **Adaptability:** Agreed that all actors, including students, accreditation agencies, employers, and science education experts, agree on the importance of students being adaptable, learning from their mistakes, and adjusting their approaches quickly in the face of new circumstances. However, there is disagreement on how this adaptability is emphasized: science education experts emphasize cognitive flexibility and problem-solving, while tutors and nonprofit organizations focus on strategy modification and the ability to face challenges with confidence.
- **Critical thinking:** There is a consensus on the importance of analyzing information objectively, questioning assumptions, and examining diverse perspectives to make informed decisions and solve complex problems reflectively. However, there are discrepancies in emphasis and priorities: while students emphasize reflection and questioning arguments, tutors emphasize deep and thorough learning about problems; science education experts focus on discerning the quality of information and formulating meaningful questions.
- **Creative Problem Solving**: Different actors, including students, faculty, tutors, science education experts, accreditation agencies, local governments, employers, and non-profit organizations, converge on the importance of creativity and innovation in solving problems. However, they diverge in how they define and emphasize specific aspects of this activity, from thinking outside the box to generating original solutions, addressing academic or local challenges, and fostering creative expression across disciplines.

Table 28.
Definition of the behavioral activities by the participating actors

Participants	Behavioral activities			
	Contextual action implementation	**Teamwork**	**Time Manage**	**Clear communication**
Student	Practical application of the knowledge acquired in the classroom.	Collaborate with other students on academic projects, research, or group assignments	Maintaining a balance between my personal and academic life	Expressing ideas clearly and concisely
Faculty	Undertaking projects, or making informed decisions based on their understanding of the theoretical material.	Working effectively with others, contributing positively to a group, and achieving common goals	Organizing their tasks, setting priorities, and meeting deadlines	Ability to listen attentively, ask relevant questions, and convey information effectively
Tutors	Use the concepts, theories, and skills learned in class in practical, real-life situations	Listen to the ideas of others, contribute their skills and knowledge, and resolve conflicts constructively.	Efficiently planning, organizing, and prioritizing responsibilities	To present persuasive arguments, and communicate clearly with professors and peers
Science education expert	Effectively and relevantly use the information acquired through reading, research, and classes in context	Actively engage in the pursuit of group goals	Planning, prioritizing, and allocating your time and resources to meet academic deadlines and commitments	To express their ideas and thoughts in a clear, coherent, and persuasive manner
Accrediting Agency	Ability to transfer their theoretical understanding to real problems, projects, or specific tasks	Ability to collaborate effectively with peers, contributing their skills to the group	To organize their activities efficiently, establishing priorities	Being a good listener and showing empathy for others
Local government	Understand and use concepts, theories, and skills in a practical manner	Participate in projects and activities that foster cooperation, respecting diverse perspectives and abilities	Balancing their studies, extracurricular activities, and personal commitments	Convey information, resolve conflicts constructively, and promote mutual understanding
Employer	Relate theoretical concepts to concrete problems and show creativity in the application of solutions.	Collaborate harmoniously with peers, actively contribute to group dynamics, and demonstrate leadership skills	Ability to plan and maintain a high level of productivity	To express their ideas clearly and persuasively, adapting to the audience and the context.
Non-profit organizations	Using their skills and knowledge to address specific challenges and needs	Working effectively with people of diverse perspectives and skills	Balancing their life between school, personal, and professional life	Speaking in a way that achieves collaboration, problem-solving, and building strong relationships

Source: Own elaboration based on the Virtual co-creation session results

Table 29.
Definition of the cognitive activities by the participating actors

Participants	Cognitive activities			
	Participation	**Adaptability**	**Critical thinking**	**Creative Problem Solving**
Student	Actively participate in classes, seminars, group discussions, and extracurricular activities	Adjust and thrive in a variety of academic and social situations	Analyse information reflectively and question assumptions, arguments, and evidence	Think outside the box and develop original ideas
Faculty	The ability of the students to be actively involved in the educational process	The ability of the students to adjust to different learning situations and contexts	Ability to examine objectively and logically, identify biases, and make informed decisions	The ability of the students to generate original ideas, innovative solutions, and fresh approaches to problems
Tutors	Contribute relevant ideas, questions, and comments	Modifying their approaches or strategies as needed	Deeper learning and a more complete understanding of the issues	Approaching academic challenges and tasks in an innovative and original way
Science education expert	Active and voluntary involvement of students in activities, discussions, and learning processes	Cognitive flexibility, willingness to deal with changes in the curriculum, problem-solving, and ability to learn from experience	Discerning the quality of information, formulating and meaningful questions	Imagination, the exploration of new perspectives, and creative problem-solving.
Accrediting Agency	Attending classes, contributing to discussions, collaborating with peers on group projects	Face new circumstances flexibly, learn from their mistakes, and look for creative solutions.	Examine different perspectives and make logical arguments	Approaching problems in a novel way, proposing solutions that are out of the ordinary
Local government	Includes student activities, community events, and public service projects.	Willingness to learn and evolve reflects an open and resilient mindset	Evaluate and solve complex problems with objectivity	Enriching the academic environment and inspiring new ways of addressing local challenges
Employer	Proactively engage in projects, meetings, and discussions	Adapt quickly to new circumstances, learn from your mistakes, and adjust your approach.	Analyse information objectively, question assumptions, identify problems, and generate creative solutions	Creative thinking in generating ideas, solving problems, and presenting innovative solutions
Non-profit organizations	Become actively involved in a variety of activities, from community projects to student groups and charity events	To meet challenges with confidence and adjust to changing environments	To analyze problems in depth and to reflect on different perspectives	Creative expression through various disciplines promotes an environment that inspires imagination and originality.

Source: Own elaboration based on the Virtual co-creation session results

6.2.1.2 Face-to-face co-creation session results

Taking into account the description of the 5 activities indicated above in Table 25, the results obtained from each of them are described below. Then synchronous and face-to-face co-creation session results are subsequently presented, featuring the participation of the same virtual actors within the realm of the HE service ecosystem. Appendice 03 evidence of the face-to-face co-creation activities.

Activity 1 results. "Empathy timeline"

The creation of an empathetic timeline facilitated the building of collaborative work by bringing participants together to discuss the issues and consider them in a way they may not have done before. After participants reflected on the HE complexity in Mexico from their different points of view, they shared how they are affected by the commodification of the service ecosystem. In this first phase of the face-to-face Living lab, the focus was on considering and discussing the problems that graduates of HEIs face when entering the workforce. As a result of this activity, the actors were able to synthesize four insights; these responses represented the most salient concerns identified by the actors participating in the activity.

- The main problem that recent graduates face when starting their careers is the lack of work experience in their field. This implies that they are not familiar with the everyday situations and common challenges they will face in the working world. This problem was identified by various actors, such as employers, professors, graduates, and non-profit organizations.
- Another relevant aspect that deserves to be highlighted is the emotional aspect of the students. Despite having the necessary tools and knowledge to perform in the workplace, many of them are affected by emotional challenges that are not adequately addressed in the classroom. On occasion, they are even harmed by certain faculty. This problem is recognized by students, professors, and HE experts alike.
- A third situation of great relevance, especially for employers, is the lack of communication skills and understanding on the part of graduates. This means that

they often do not follow instructions properly or have difficulty understanding them, which can lead to administrative problems and unsatisfactory work results.

Activity 2 results. “Future Newspaper”

The "Future Newspaper" tool helps jump-start the creative and critical process by asking participants to imagine a newspaper headline they would like to see. In retrospect, from their experience, participants articulate the conditions, resources, actors, and events that could help achieve those outcomes. Finally, participants generate space for discussion about possible strategies that could help achieve. Participants thought of the following three headlines they would like to see in 2030 in the newspapers of Mexico regarding HE.

- "A new record in the educational quality of Higher Education in Mexico"
- "Mexican wins Nobel Prize in Science"
- "100% of university graduates are employed in specialized jobs related to their training”

The main people in these eye-catching headlines are university students who have the potential to make the future of their country better. To make this happen, these actors have in-depth discussions to agree on important things in the HE ecosystem. They look at resources, what is happening now, and all the different people involved, both inside and outside the ecosystem. Also, they talk about how actors should work together to be good at their studies and make a positive difference in society.

From the observation and analysis of the logs collected, as well as the results captured in the collaborative work of the participants, the following findings derived from this activity can be identified. The educational ecosystem is made up of several fundamental categories that interact with each other to foster an effective and enriching learning environment. First, educational resources represent the pillar on which the quality of the educational system and its institutions is based. These institutions, supported by appropriate tools and programs, as well as high-tech facilities and laboratories, form the essential core of this component. Such resources not only facilitate the delivery of high-level education but also promote adaptation and collaboration among the different actors within the ecosystem.

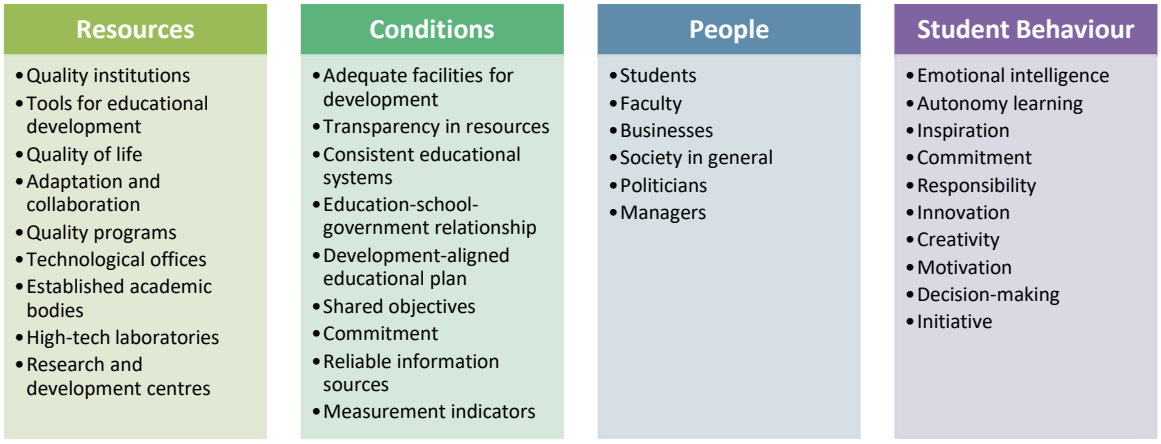
On the other hand, the conditions in which education takes place are crucial to its effectiveness and equity. Transparency in the allocation of resources, together with consistent educational systems and collaborative relationships between schools, governments, and society in general, creates an environment conducive to learning. In addition, an education plan aligned with development needs and shared goals ensures a coherent approach to continuous improvement.

In addition, the people involved in the educational process, from students and teachers to business and political leaders, play key roles in the success of the education system. Students, especially, must develop key skills such as emotional intelligence, autonomy in learning, and the ability to make responsible and innovative decisions. Meanwhile, teachers, along with support from society and the business sector, work to create an environment that fosters inspiration, engagement, and motivation among students.

Ultimately, the goal of the educational ecosystem is to cultivate competent and committed individuals who contribute to the development of society as a whole. The interconnection between resources, conditions, people, and student behavior creates a comprehensive framework that seeks to improve the quality of education and prepare students to meet the challenges of the modern world with creativity, innovation, and responsibility. Annex 4 shows photographs of the collegial work carried out.

Delving deeper into this engaging dialogue, Figure 8 serves as a visual representation of the outcomes arising from these dynamic exchanges of ideas and perspectives. This figure represents the collective wisdom and insights garnered from the deliberations, shedding light on the intricate web of considerations that underpin the quest for a robust and inclusive HE ecosystem.

Figure 8.
Relevant elements and their components



Source: Own elaboration based on the Face-to-face co-creation session results

Activity 3 results. "Sensing Strategies Canvas"

The Sensing Strategies canvas played a key role in allowing participants to integrate their knowledge through a rigorous discussion based on their experiences. In addition, participants were faced with the following crucial question, "What are the strategies that could contribute to the improvement of the performance of the students in their academic activities?" They worked in teams to reach a consensus on the strategies they proposed. The strategies identified include:

- **Continuous training of faculty and administrators:** The importance of providing constant and updated training for faculty and administrative staff is recognized, which will enable them to keep abreast of the latest trends and best practices in education.
- **Improving the infrastructure and processes of HEIs:** The quality of education also depends to a large extent on the facilities and processes in HEIs. Therefore, it is essential to invest in improving infrastructures and procedures to create a more effective and efficient learning environment.
- **Comprehensive performance assessment, considering the context:** The measurement of student performance must be comprehensive and consider the

environment in which they operate. This implies not only evaluating academic results but also considering external factors.

- **Public policies for the benefit of the students:** The implementation of public policies that have a positive impact on all students is advocated, guaranteeing equitable access to education, and supporting their academic development.
- **Mentoring and personalized tutoring:** Implement mentoring and tutoring programs in which more experienced students help their peers in areas where they may need additional support, such as academic problem-solving or time management.
- **Encouraging participation:** Encourage student participation in classes and extracurricular activities, promoting discussions, collaborative projects, and the expression of opinions.
- **Innovative educational technology**: Introduce advanced educational technology, such as interactive online platforms and multimedia resources, to make the learning process more attractive and accessible, adapting it to different learning styles.
- **Psychological and emotional support programs:** Offer psychological and emotional support service to students to help them manage stress, anxiety, and other problems that may affect their academic performance.
- **Student evaluation and continuous feedback:** Implement continuous student evaluation and feedback instead of end-of-semester only, providing faculty and institution with constant feedback on their performance and areas for improvement.
- **Self-study:** Acquiring knowledge, skills, or expertise on a particular subject or topic independently, without formal instruction from faculty.

Activity 4 results. "Traffic Light"

During this activity, participants validate with a green post-it the strategies they consider most actionable for students, with yellow the ones they intervene in, but cannot control, and in red the ones that are definitely out of their control due to the current educational system of HEIs in Mexico. The validation is entirely based on their experience and perception of their role as ecosystem actors but agreed after three rounds of validation and exchange of opinions and perceptions to reach an agreement as an ecosystem and not as an actor. Table 30 shows the validation of the actors by traffic light color.

Table 30.

Validation of the actors regarding the proposed strategies

Strategy	Validation
Continuous training of faculty and administrative	
Improving the infrastructure and processes of HEIs	
Comprehensive performance assessment, considering the context	
Public policies for the benefit of the students	
Mentoring and personalized tutoring	
Specialized participation	
Innovative educational technology	
Psychological and emotional programs	
Student evaluation and continuous feedback	
Self-study	

Source: Own elaboration based on the Face-to-face co-creation session results

The activities in red, which represent those that are beyond the control of the students due to the educational system, include continuous training of faculty and administration, improvement of the infrastructure and processes of the HEIs, and public policies for the benefit of students. The color red symbolizes the difficulty or impossibility for students to intervene directly in these areas due to institutional or governmental restrictions.

The group of activities in yellow, which include comprehensive performance assessment considering the context, personalized tutoring and counseling, specialized participation, and innovative educational technology, highlights the need for interventions that, although they cannot be completely controlled by the students, can still be influenced to some extent by the actors in the educational ecosystem. The yellow color reflects this situation of partial or conditional intervention.

Finally, the group of activities in green, which encompasses one-on-one tutoring and counseling, psychological and emotional programs, student assessment and ongoing

feedback, and self-study, highlights areas where participants perceive students have greater control and agency. Green symbolizes the perceived feasibility and effectiveness of these strategies in improving student experience and performance within the educational ecosystem.

Activity 5 results. "Feedback Mailbox"

During this closing activity, participants generate feedback for the other actors based on their perspectives and opinions of the strategies they proposed and validated in the previous activities, resulting in the following relevant feedback. Figure 9 serves as a visual representation of the outcomes raised.

Convergently, graduates, education experts, students, and members of non-profit organizations agree on the need for a profound transformation of the curricula. This perspective is based on the shared perception that current academic activities are obsolete, as it is argued that student should be devoted to the development of entrepreneurial skills, to consider the possibility of undertaking their projects.

Another idea that emerged and consolidated in the course of this activity is the imperative need to strengthen the relationship between HEIs and the industry. Sustaining ongoing communication would make it possible to identify early on the challenges faced by recent graduates and, from the perspective of the universities, provide solutions before they affect current cohorts of students.

Finally, a strategy that provoked disagreement among both HEIs managers and education experts was the proposal to carry out a comprehensive evaluation that would consider the educational environment. Actors argue that this measure does not guarantee substantial improvements in the quality of teaching provided or in the learning process of students. Furthermore, they argue that this approach isolates the student from a global context.

Figure 9.
Feedback Mailbox outcomes

Source: Own elaboration based on the Face-to-face co-creation session results

6.3 Conclusions of the research phase

The results obtained from the face-to-face and virtual co-creation sessions significantly answer the research question SQ3, *Which inquires about the cognitive and behavioral activities considered crucial for student participation as co-creators of value in the HE service ecosystem?* The workshops and sessions provided an in-depth understanding of the expectations and challenges faced by the actors. In terms of cognitive activities, the importance of adaptability, critical thinking, and creativity are highlighted, emphasizing their fundamental role in the learning process of the students. In addition, the need for behavioral skills, such as effective communication, teamwork, and time management, are highlighted as essential elements for the academic and personal success of the students.

Participants from diverse roles in the ecosystem offered varied perspectives, enriching the understanding of each specific expectation of the actors. The diversity of roles, from students and faculty to employers and non-profit organizations, contributed to a holistic picture of the HE service ecosystem. The activity that explored "Role in the higher education service ecosystem" provided valuable information on how each participant perceives their role, allowing for a deeper understanding of specific expectations.

The results of the face-to-face co-creation sessions revealed important insights into the challenges and potential improvements in the HE service ecosystem. During the "Empathy Timeline" activity, participants discussed collaboratively, highlighting concerns

of recent graduates as they enter the labor market. Key issues included lack of work experience, emotional challenges for students, and deficits in communication skills among graduates. These perceptions, synthesized through content analysis, represented the collective concerns of actors such as employers, faculty, graduates, and non-profit organizations.

In the "Newspaper of the Future" activity, participants envisioned a promising future for HE in Mexico. Headlines such as "New record in educational quality of Higher Education in Mexico," "Mexican wins Nobel Prize in Science," and "University graduates 100% guaranteed" reflected the shared aspiration for academic excellence and positive contributions of university graduates. The "Sensory Strategies Canvas" activity played a key role in identifying actionable strategies to improve student academic achievement. These strategies included ongoing training for faculty and administrators, infrastructure and process improvements, comprehensive performance assessment, and the implementation of public policies that support students. Subsequent validation using a "Traffic Light" system categorized the strategies according to their viability within the current educational system.

In the closing activity "Feedback Mailbox", participants converged on the need for a profound transformation of curricula, emphasizing the development of entrepreneurial skills and strengthening the relationship between HEIs and industry. However, disagreements arose over the proposal for a comprehensive evaluation considering the educational environment, with concerns about its effectiveness. In conclusion, the face-to-face co-creation sessions provided valuable insights into the challenges and aspirations in the ecosystem of HE service in Mexico.

In practical terms, the results not only identify cognitive and behavioral activities but also offer insights into effective strategies for managing collaborative learning in the HE environment. The activities with renewed names and detailed definitions provided by the participants contribute to the practical implementation of this knowledge. In summary, the results highlight a consensus on the importance of certain skills and attitudes for student participation in the co-creation of value, evidencing the need for HE that fosters adaptability, critical thinking, creativity, and key behavioral skills. The diversity of perspectives provides a wealth of information that can significantly enhance collaborative learning environments in the ecosystem.

CHAPTER VII

Discussion and general conclusions

Chapter VII: Discussion and general conclusions

7.1 The student co-creation behavioral model proposal

By using an approach that focuses on building theory from unprocessed information, is possible to explore the complexity and nuance of human behavior in different cultural contexts (Chen et al., 2015). This approach uncovers new insights and understanding about sensitive topics, which can ultimately lead to more effective interventions and solutions. The statement emphasizes the importance of taking a thoughtful and sensitive approach when studying human behavior on sensitive topics in different cultural contexts. It encourages researchers to approach their work with an open mind and a willingness to explore new perspectives and ideas (Carter et al., 2014; Chen et al., 2015).

Based on the foregoing, the fundamental objective of this research was to develop a student value co-creation behavior (SVCB) conceptual model, based on the Service dominant Logic (SDL) approach, considering the service ecosystem dynamic and complexity, seeking to integrate both the essential cognitive and behavioral activities of the students during the academic interaction, to contribute to the social value of Higher Education (HE) in a marketized environment.

This specific objective has been comprehensively met over three phases. In Phase I, a single behavioral model customer-centered co-creation has been identified under the SDL approach, developed by Tommasetti et al. (2017). This model is oriented to the HE service ecosystem, contemplating both cognitive and behavioral activities, which is in line with the revised academic literature in the field of education. Because no empirical evidence of the applicability of this model in the higher education ecosystem was identified, this research explores such value cocreation behavior of students in a specific HE environment.

After identifying the current co-creation behavior of students in a marketization educational ecosystem, it is essential to study this ecosystem to understand its dynamics and complexity in the process of co-creating value during academic activities. Based on the above, Phase II identified the influence of processes, institutional arrangements, and relationships on value co-creation in the studied ecosystem, highlighting the perspective of actors through in-depth interviews.

After learning about the dynamics and complexities of the educational ecosystem, Phase III allowed the integration of knowledge and experience of the actors through co-creation workshops, providing a holistic and deep understanding of the value co-creation phenomenon. This third phase was focused on determinate the cognitive and behavioral activities essential for student participation as co-creators of value. Co-creation sessions revealed crucial skills such as adaptability, critical thinking, and creativity, along with key behavioral skills for academic and personal success. Participants from diverse roles in the HE ecosystem offered different perspectives, contributing to a better understanding of expectations and challenges in this context.

The proposed SVCB model considers behavioral and cognitive activities within the context of Education, framed within the SDL approach and the ecosystem of services theory (Phase I). In addition, it recognizes and integrates the dynamics and complexity of the educational environment, as expressed and defined by the key participants in its functioning (Phase II). Finally, the model integrates the cognitive and behavioral activities derived from the experiential knowledge and perspective of the actors involved. This approach is concretized by triangulating the theoretical basis (a priori categories) with the data collected from the participants (emergent categories). The triangulation and categorization of results for the elaboration of the proposed model are detailed below.

7.1.1 Matrix triangulation results

This technique may increase the validity and reliability of the emergent and a priori categories that build the model proposal since it allows the consistency of the data and the correspondence between the data and the categories to be verified. By using multiple sources of information, patterns, and relationships can be identified that would not be evident with a single source of information. Triangulation of informants, data, and techniques supports building a completer and more accurate theoretical model by reducing bias, improving the validity and reliability of research results, and providing a more complete and detailed understanding of the research phenomenon or problem (Carter et al., 2014; Thurmond, 2001).

After the outcomes derived from; the literature review, interviews, and both virtual and face-to-face co-creation sessions are acquired, a comprehensive analysis is conducted

through triangulation. This process involves comparing and aligning the obtained results with predetermined categories derived from existing literature and the criteria of the research. To facilitate this triangulation, a specialized matrix tailored for this purpose is employed, assisted by the utilization of ATLAS.ti 9 software. The matrix triangulation, as illustrated in Table 31, serves as a structured framework to synthesize and integrate the diverse perspectives garnered from the co-creation sessions with the established theoretical foundations and the discernment of the researcher. This meticulous approach enhances the validity and robustness of the findings, offering a nuanced understanding of the data and enriching the overall research analysis.

7.1.2 Categorization results

A rigorous and systematic analysis of the data collected will be carried out using ATLAS.ti 9 for qualitative analysis. This methodological approach provides a valuable opportunity for an enriched and nuanced understanding of the qualitative data by allowing for the identification of emerging patterns, themes, and relationships in the discourse of the participants.

In the first phase of the analysis, the transcripts of the in-depth interviews and the results of the co-creation sessions are imported into the ATLAS.ti 9 software. This is followed by an open coding process, where tags are assigned to relevant text segments. These tags served as the first clues to the emerging categories. Subsequently, an axial coding analysis was performed to establish connections between the tags and group them into broader and more meaningful categories. In the end, the selective coding technique is employed to refine and define the emerging categories more precisely.

Through Table 32 is possible to see the sum of the pre-established categories, as well as those that emerged from the coding applied to the in-depth interviews and the results obtained from the various value co-creation tools used during the co-creation sessions, whether virtual or face-to-face. Next, we proceed to identify patterns, themes, and relationships emerging in the discourse of the participants, as well as in the written results of the co-creation activities.

Table 31.
Data triangulation matrix

Priority categories						Emerging categories					
Education literature		**Higher Education value co-creation literature**		**Higher Education Value Co-creation Model**		**Interviews**		**Virtual Co-creation session**		**Face-to-face Co-creation session**	
C	SC	C	SC	C	SC	SC		C	SC	C	SC
Cognitive activities	Attention	**Co-design**	Determining their needs from the academic programs	**Co-production**	Knowledge	Integrating knowledge and experiences		**Behavioral activities**	Contextual action implementation	**Student Behaviour**	Responsibility
	Perception					Practical application					
	Memory		Select course options based on personal objectives			Engagement of the student					Innovation
	Comprehension				Equity	Constructing their knowledge			Teamwork		
	Analysis		Construct their educational value proposition		Interaction	Quality interactions			Time Management		Creativity
	Synthesis					Active participation					
	Reflective Practice	**Critical thinking**	Informed decision making			Adaptation to new pedagogical techniques			Clear Communication		Decision-making
	Critical thinking		Assess the validity of the information								Initiative
Behavioral Activities	Active participation	**Active participation**	Active participation in academic activities	**Value in use**	Experience	Student´s empowerment		**Cognitive activities**	Participation		Emotional intelligence
	Collaborative learning					Ethical and moral values					
	Sharing information		Actions as a result of the sense of community			Student´s motivation			Collaboration with peers		Autonomy learning
	Feedback					Student´s confidence					
	Peer teaching and learning		Academic activities engagement		Personalization	Course selection and approaches			Adaptability		Inspiration
	Application of knowledge				Relationship	Collaboration between actors					Commitment
	Participation in extracurricular activities	**Co-production**	Integration of resources and efforts						Critical thinking		
	Respectful and inclusive behavior		Exchange of previous knowledge acquired			Student maturity			Creative Problem Solving		Motivation
	Responsibility					Student adaptability					

Source: Own elaboration

In addition to the above, Table 33 presents the complexity of the educational ecosystem. This complexity has been obtained both from the literature review and from the perception of the actors involved in the processes and relationships that develop in the HE ecosystem analyzed in this study. Finally, four categories are presented that emerged from the identification of patterns and themes, considering both previously established and emerging information.

Moreover, it is considered the categories that are built with the codes obtained from the ATLAS.ti 9 analyses of the information, with the following relationships: Necessary for
 Supports
 Requires
 Related with
 Affected by
 Enhanced by. Obtaining 6 proposed categories that could compose the Student Value Co-creation Behavior (SVCB) in the HE service ecosystem, three categories related to behavioral activities (Academic participation and engagement, Collaboration and communication, and Attitude and personal abilities), and three more categories corresponding to cognitive activities (Knowledge processing and integration, Personal education developing and Intrapersonal social and emotional skills), these categories are composed of a total of twenty-six items. Figure 10 illustrates the proposed model, as well as Table 34, the categories with their items in the form of a scale.

Table 32.
Behavioral and cognitive obtained categories

Aprioristic behavioural categories	Emerging behavioral activities	Aprioristic cognitive activities	Emerging Cognitive Activities
▪ Collaborative learning ▪ Sharing information ▪ Feedback ▪ Peer teaching and learning ▪ Application of knowledge ▪ Participation in extracurricular activities ▪ Respectful and inclusive behavior ▪ Responsibility ▪ Active participation in academic activities ▪ Actions because of the sense of community ▪ Academic activities engagement ▪ Integration of resources and efforts ▪ Exchange of previous knowledge acquired	▪ Practical application ▪ Engagement of the students ▪ Quality interactions ▪ Active participants ▪ Empowerment, motivation, and confidence of the students ▪ Maturity and adaptability of students ▪ Contextual action implementation ▪ Teamwork ▪ Time Management ▪ Clear Communication ▪ Participation ▪ Collaboration with peers ▪ Adaptability ▪ Responsibility ▪ Innovation ▪ Creativity ▪ Initiative ▪ Commitment ▪ Motivation	▪ Determining their needs from the academic programs ▪ Select course options based on personal objectives ▪ Construct their educational value proposition ▪ Informed decision-making ▪ Assess the validity of the information ▪ Attention ▪ Perception ▪ Memory ▪ Comprehension ▪ Analysis ▪ Synthesis ▪ Reflective Practice ▪ Critical thinking	▪ Integrating knowledge and experiences ▪ Constructing their knowledge ▪ Ethical and moral values ▪ Critical thinking ▪ Creative Problem Solving ▪ Decision-making ▪ Emotional intelligence ▪ Autonomy learning ▪ Inspiration

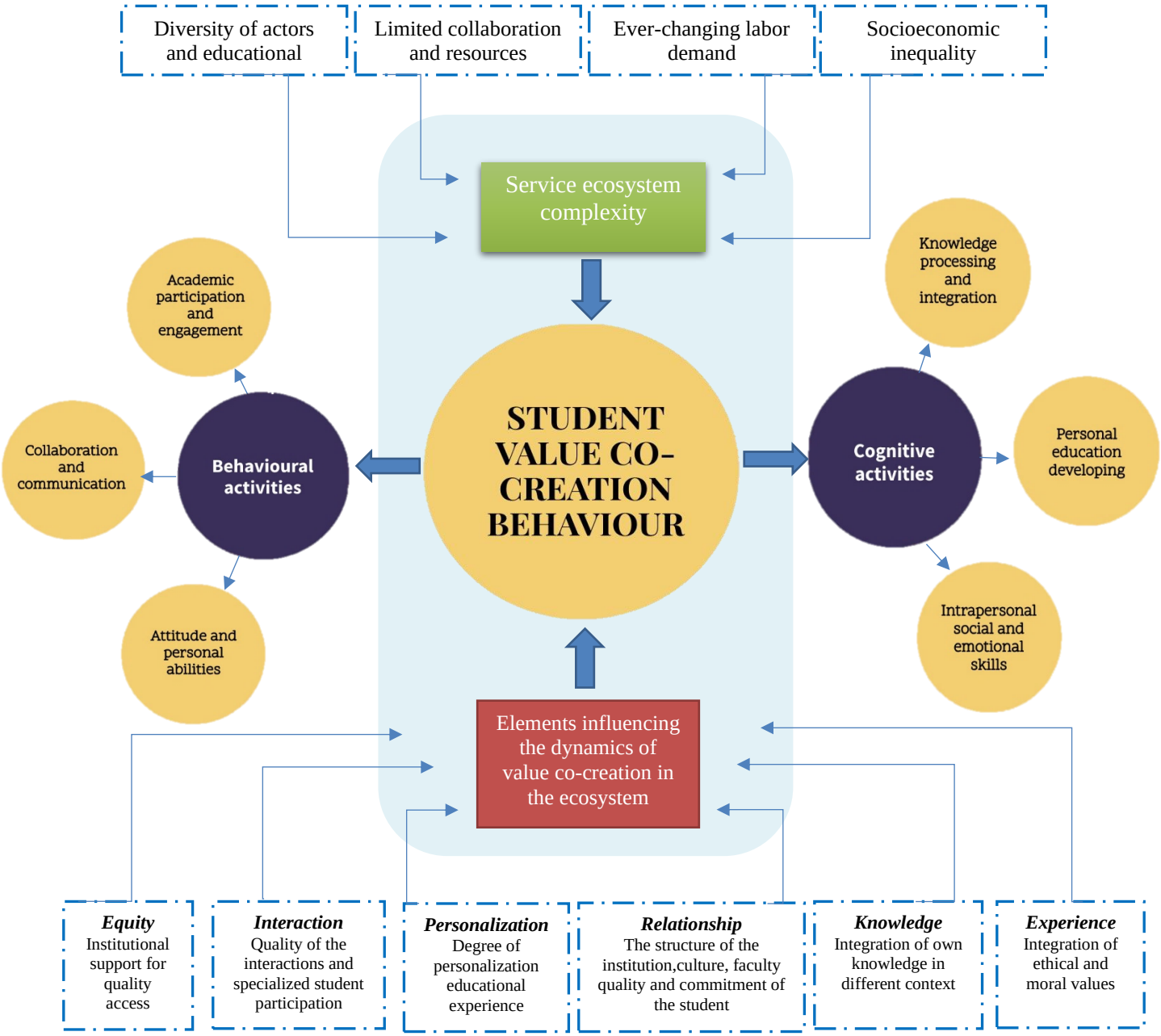
Source: Own elaboration

Table 33.
Ecosystem complexity categories

Aprioristic complexity of the educational ecosystem		Emerging complexity of the educational ecosystem	Categories	Description
Multiple actors	Various actors, both living and non-living, shape the dynamic of the HE service ecosystem	▪ Limited collaboration between institutions and actors	Diversity of actors and educational approaches	The presence of multiple actors, both individuals and institutions, influencing the higher education ecosystem generates complexity. Different public and private institutions of various sizes and educational approaches contribute to a broad diversity in higher education.
Variety of educational institutions	A variety of public and private educational institutions of different sizes and focuses	▪ Absence of education personation due to the disproportionate student-to-teacher ratio ▪ Limited financial institutional support	Limited collaboration and resources	The evolution of the labor market demands continuous attention to higher education to meet the demand for highly skilled workers. This implies the constant need to adapt educational programs to be in line with the changing market needs.
Rapidly changing labor market	The evolving job market necessitates a heightened focus on higher education to meet the demand for skilled workers.	▪ Limited institutional-industry communication and unequal access to employment opportunities	Ever-changing labor demand	The lack of effective collaboration between institutions and actors in the university education system can hinder the optimization of resources and the improvement of education quality. Furthermore, limited educational counseling due to an unequal student-to-teacher ratio contributes to this complexity
Multifactorial influence	The ecosystem of higher education service is influenced by economic, political, and cultural factors.	▪ Unequal economy ▪ Socioeconomic barriers	Socioeconomic inequality	The economic gap and socioeconomic barriers present in society are reflected in higher education. The lack of financial support and inequity in access to employment opportunities after graduation are significant challenges that create complexity in the university education system.

Source: Own elaboration

Figure 10.
SVCB model proposed



Source: Own elaboration

Table 34.
SVCB scale proposed

Category		Item
Behavioral activities	Academic participation and engagement	Specialized participation
		Quality interactions
		Feedback
		Personal commitment
		Participation in extracurricular activities
	Collaboration and communication	Knowledge sharing
		Peer teaching and learning
		Respectful and inclusive behaviour
		Integration of resources
		Clear communication
		Teamwork
	Attitude and personal abilities	Adaptability
		Initiative
		Responsibility
		Time management
Cognitive activities	Knowledge processing and integration	Assessing the credibility of information
		Critical thinking
		Integrating personal experiences
	Personal education developing	Autonomy learning
		Program personal needs assessment
		Identify personal academic goals
		Educational value proposition
	Intrapersonal social and emotional skills	Reflective practice
		Ethical and moral values
		Emotional intelligence
		Sense of community activities

Source: Own elaboration

7.2 Discussions

This section discusses the theoretical underpinnings of the proposed SVCB model while exploring the integration of the experiential knowledge of ecosystem actors into emerging categories. In this analysis, the conceptual foundations underpinning the SVCB model are addressed, while examining in detail how the practical knowledge of the different ecosystem participants is incorporated and valued.

During Phase I the results revealed the presence of three segments of students according to their degree of participation in co-creation: optimal (52.2%), medium (29.8%), and low (18%). Although not all students are inclined to co-create value during their educational experience, all have obtained ratings above 8.5 on a scale of 10, placing them as outstanding students. This situation evidences the adoption of generic market strategies in response to increasing student demand and neoliberal ideology (Judson and Taylor, 2014; Banwait, 2021; Schelble, 2006). In terms of the implications of these results, it is suggested that inflated qualifications may exist in HEIs due to marketization and government pressures, posing sustainability threats to the educational ecosystem in Latin America (LATAM) (Hemsley-Brown and Lowrie, 2010; Molesworth et al., 2010).

Also, the findings support the risk associated with the application of the pollution metaphor in the educational ecosystem (Diaz-Mendez et al., 2017). Although students may feel satisfied with their educational experience, they do not necessarily contribute as co-creators of value in it (Guilbault, 2016; Lo, 2017; Lowrie and Hemsley-Brown, 2011). Student satisfaction is prioritized to attract and retain students, corroborated by both the literature reviewed and the empirical research conducted. This is reflected in the introduction of elements, strategies, or metrics from other areas of satisfaction, not necessarily appropriate for the educational context.

The literature reviewed establishes a solid theoretical basis for the complex dynamics of value co-creation in HE (Driscoll and Wicks, 1998; Svensson and Wood, 2007). In this sense, the results offer support for this theory and provide new perspectives on the operationalization of value co-creation in the educational ecosystem. The findings obtained in Phase II of the research not only align with the existing literature but also contribute significantly to it. Regarding the key dimensions of co-creation, modeled by Dollinger et al.

(2018), they include Co-production (Knowledge, Equity, and Interaction) and Value in Use (Experience, Personalization, and Relationship). The findings on co-production reveal the challenges and nuances in knowledge integration, emphasizing the central role of learners as active contributors to the value proposition. The exploration of Value in Use sheds light on how value co-creation significantly impacts students' educational experiences. The study aligns with the literature by considering students as co-creators of value, actively participating in knowledge creation.

Based on the results, it is possible to identify the central importance of students actively incorporating knowledge and experiences in the educational proposal, but also recognize challenges such as student participation, effective communication, and differences between institutions. Collaboration between students, teachers, and institutions is considered essential for an enriched educational proposal, emphasizing equity and student participation. Regarding the Value in Use dimension, the significant impact of value co-creation on students' educational experiences is highlighted, motivating and empowering them through their participation in the co-creation of knowledge.

Despite the positive effects, challenges such as demotivation or confusion among students are noted. Collaboration between educational institutions and employers is highlighted as crucial for students to understand the demands of professional activity, with critical factors such as the quality of teaching, the design of the learning environment, and the relationship between teachers and students.

The outcomes derived from phase III of both face-to-face and virtual co-creation sessions align closely with existing literature. Scholarly works underscore a shift towards a service-based exchange paradigm in marketing management, emphasizing customer involvement in value co-creation (Permatasari and Dellyana, 2021). Higher Education institutions (HEIs) embracing co-creation prioritize maximizing student engagement rather than assuming knowledge of ideal student needs, as advocated by Bovill (2020).

The cognitive activities findings underscore the significance of adaptability, critical thinking, and creativity, echoing literature emphasizing the necessity of cultivating key skills in university graduates (Soini et al., 2019). Moreover, the importance of behavioral skills such as effective communication, teamwork, and time management, essential for academic and personal success, is highlighted, aligning with perspectives put forth by Bovill et al.

(2011). The diversity of roles represented in the co-creation sessions; students, faculty, employers, and nonprofits among others, corresponds with literature advocating for a multi-actor understanding of the HE service ecosystem (Ranjan and Read, 2016).

Moreover, the application of the SBCV theoretical model, employing matrix triangulation, provided a structured framework for integrating and analyzing diverse perspectives, consistent with literature advocating holistic approaches to understanding value co-creation in the HE service ecosystem (Dollinger et al., 2018). The proposed SVCB scale delineated key dimensions for assessing academic engagement, collaboration, attitude, personal skills, and cognitive processes among students, resonating with literature highlighting the multidimensionality of value co-creation (Tommasetti et al., 2017).

Regarding the CVCB scale developed by Tommasetti et al. (2017), intended for implementation in the HE service ecosystem, there are convergences and differences with the model proposed in this research. Both models converge on aspects such as cooperation, teamwork, resource integration, learning, and knowledge sharing. However, the proposed SVCB model focuses more specifically on assessing academic behavior, collaboration, communication, personal attitudes, skills, and cognitive activities within the academic environment, providing a comprehensive framework tailored to student co-creators.

Finally, it is possible to state that the SVCB model proposed in this research work is constructed in three distinct phases. First, the theoretical basis of the Tommasetti et al. (2017) scale is recovered. Then, the applicable and non-applicable variables in the studied educational ecosystem are identified. Subsequently, the dynamics and complexity of the ecosystem are delved into for a deeper understanding of value generation within academic activities.

7.2.3 Theoretical and Practical Implications

The conclusions drawn from the research phase offer significant insights into the dynamics of SVCB in a specific Mexican HE context. The findings present some theoretical and practical implications that extend across various dimensions of academic activities and institutional management.

First regarding theoretical implications, the results reveal three segments of students with differentiated levels of co-creation, highlighting the complexity of student engagement and the need to understand the different stages of the co-creative process in the educational context. The results also point to the influence of marketization in student assessment, evidencing possible inflated grades and a disconnect between numerical scores and actual student engagement. This aligns with the theory of ecosystem polluting, highlighting how market demands can negatively affect the quality and fundamental goals of the ecosystem.

Also, some practical implications are identified. A noteworthy observation is that the 100% approval rate for the surveyed courses does not align with the co-creation behavior results. This discrepancy indicates that even students with low co-creation levels manage to pass their courses, raising questions about the reliability of grading systems and the disconnect between academic success and real participation in value co-creation.

Despite indicators of educational quality based on student retention and graduation rates, the study suggests that there is room for improvement in co-creation behavior, particularly in the public sector. This raises concerns about the sustainability of HEIs in the LATAM region due to marketization tendencies and the disconnect between institutional management and the evolving nature of educational service.

To address these challenges, the study advocates for integrating advances in service sciences and marketing into the management of HEIs. The traditional student-customer and professor-provider approach is deemed short-sighted, and there is a call for a more comprehensive perspective that goes beyond immediate satisfaction and retention to preserve the social value of HE.

The findings of Phase II, provide a comprehensive understanding of the influence of processes, which has some theoretical implications. The implications of these findings have some theoretical and practical significance, influencing various aspects of educational practices, institutional strategies, and the collaborations between actors.

Firstly, the recognition of the active involvement of the student in integrating knowledge and experiences into the value proposition emphasizes the need for educational institutions to foster an environment that encourages and facilitates this engagement. Practical challenges such as student engagement, effective communication, and institutional variability in approach emerge as areas demanding focused attention. Institutions are urged

to develop strategies to address these challenges, ensuring that the co-production of knowledge becomes a seamless and enriching process.

Collaboration emerges as a central theme in the research implications. The study emphasizes the significance of collaboration not only among students but also between students, faculty, and the institution itself. The idea that an enriched value proposition is contingent upon collaborative efforts underscores the need for fostering a culture of teamwork and knowledge exchange within the HE environment. This collaborative approach extends beyond the educational realm, advocating for partnerships between educational institutions and employers to bridge the gap between academic knowledge and market labor demands.

Also, the results regarding equity, have some practical implications, considering the importance of providing equal opportunities for students and their active participation in the construction of their knowledge. This implies that educational institutions should strive to create an inclusive environment where diverse perspectives are valued and where every student has an equitable opportunity to contribute to the co-creation of value. Addressing issues of equity becomes imperative to ensure that the benefits of value co-creation are accessible to all students. Moving into the realm of value-in-use, the research findings highlight the profound impact of co-creation on the educational experiences of the students. Institutions are urged to leverage this impact to motivate and empower students, recognizing them not merely as passive recipients but as active contributors to knowledge creation.

The collaboration between educational institutions and employers is identified as crucial in shaping the understanding of the students about labor market demands. This implies that institutions should actively seek partnerships with employers to align their educational offerings with the evolving needs of the job market. Lastly, the practical implications of the research phase advocate for a student-centric, collaborative, and equitable approach within HE. Addressing challenges, fostering collaboration, and standardizing certain aspects are key recommendations for institutions seeking to enhance the co-creation of value in the ever-evolving landscape of the educational ecosystem.

The findings of Phase III present some theoretical implications. Based on the SDL approach, these results highlight the importance of adaptability, critical thinking, and creativity as fundamental cognitive activities for the participation of the students as co-

creators. In addition, behavioral skills, such as effective communication, teamwork, and time management, are highlighted as essential elements for the academic and personal success of the students. Also, the findings reinforce the idea that HE is not only about the transmission of knowledge but also about the development of key skills for the future of the students.

From the Service Ecosystem theory, the diversity of roles represented in the co-creation sessions provides a more comprehensive view of the HE service ecosystem. The participation of the actors enriches the understanding of the specific expectations of each one. This remarks on the interconnectedness and interdependence of the living and non-living ecosystem elements, underscoring the need to approach HE as an integrated system rather than isolated components.

Considering marketization and ecosystem pollution in the context of HE highlights a complex reality, where the marketization of education directly impacts the quality of the educational ecosystem. The pressure for results and competition between institutions can lead to practices that, if not properly managed, result in an "Ecosystem polluting" of the academic environment, compromising the integrity of the educational process and negatively affecting students.

Finally, some practical implications are identified. Firstly, the research emphasizes the significance of adaptability, critical thinking, and creativity as fundamental cognitive activities for students. These insights underscore the necessity for educational approaches that foster these skills, indicating a need for curriculum adjustments and teaching methodologies that promote a more integrated learning experience.

7.3 Limitations and Future Research

On one hand, Phase I focused on exploring the current SVCB student within the HE service ecosystem reveals certain limitations. Firstly, the generalizability of the study is restricted due to its specificity to a particular professional profile and educational level within a single public university in Mexico. The sociocultural, economic, and political context of this university may not accurately reflect other regions or countries. Moreover, the chosen methodological approach, although insightful, may not capture the dynamic nature of co-creation behavior over time. Future studies should consider a comparative approach,

examining co-creation behavior across different professional areas, education levels, and institutions within the LATAM region and beyond.

Additionally, exploring the impact of marketization on student performance evaluation and the distortion of real student engagement levels is crucial. Finally, understanding the cultural influence of the context on student co-creation behavior and exploring the integration of service science advances into HE management will contribute to a more comprehensive and sustainable educational ecosystem in the LATAM region.

On the other hand, Phase II focused on considering the value co-creation service ecosystem dynamic, which involves some limitations related to the temporal dynamics of the research. By providing a snapshot of the HE service ecosystem at a specific point in time, the study may not capture long-term changes or emerging trends. Because educational environments are dynamic, the influence of processes, institutional arrangements, and relationships may evolve, and the results may not reflect long-term changes or emerging trends. Longitudinal research designs may shed light on the evolving nature of the value co-creation behavior over time.

Furthermore, in adopting the HE value co-creation model of Dollinger et al. (2018), it is critical to recognize the limitations inherent in such a model. No model is exhaustive, and limitations in the model may affect the breadth of the study. Therefore, future research could explore alternative models or integrate multiple perspectives to achieve a more holistic understanding. In addition to the foregoing, the limitation regarding institutional context is crucial. The study may not fully capture the diversity of institutional contexts within HE. Different institutions may have unique characteristics, cultures, and structures that influence value co-creation differently.

To address these limitations and advance the understanding of SVCB in the studied ecosystem, several directions for future research are proposed. First, conducting longitudinal studies over an extended period would capture the dynamic nature of the service ecosystem. This approach would allow for tracking changes, identifying emerging patterns, and assessing the sustainability of co-creation practices over time. Also complementing the scale proposed, quantitative methods may provide statistical significance of the identified categories and items.

Phase III focuses on determining the cognitive and behavioral activities of the students to co-create value, presents certain limitations, and suggests possible directions for future research. First, the generalizability of the findings is limited by the focus primarily on a specific HE service ecosystem in Mexico. To improve the external validity of the results, future research could replicate co-creation workshops in diverse cultural and geographic contexts. The temporality of the study focused on short-term outcomes, suggests the need for a longitudinal perspective. Investigating the long-term impact of co-creation initiatives on student outcomes, institutional practices, and overall quality of education may provide a more complete picture.

Finally, the lack of comparative analysis between face-to-face and virtual co-creation sessions points to a gap in understanding the effectiveness of virtual platforms in promoting co-creation. Exploring possible differences in outcomes or participation between these two approaches could provide valuable information. Additionally, consideration should be given to identifying and addressing challenges in implementing proposed changes in HEIs. Investigating practices and obstacles during the implementation of suggested strategies could enrich the practical understanding of co-creation.

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Appendices

Appendix 01.

Transcripts of interviews with ecosystem actors

Student 01

Considero que lo hacen en representación de sus proyectos integradores y en su heteroevaluación, pero solo hasta cierto nivel, porque se debe de cumplir cierto nivel y fechas, ya que esto mide nuestras habilidades de manera cualitativa y no cuantitativa.
No, porque se deben de cumplir conciertas fechas, y no se tiene una libertad de proponer, y no hay tiempo para proponer y realizar algo más, y se propone ya es extracurricular y no se ve un beneficio en la calificación, y muchos no nos animamos a integrar nuestras ideas al plan de estudios, porque muchas actividades ya están hechas desde antes y se deben de realizar por indicaciones del profesor o la institución. Intervienen más en cuanto a la administración, ya que, si los profesores no pueden agregar propuestas o acciones, considero que ellos son los más involucrado y los encargados del plan educativo de la universidad.
Es muy importante, porque el estudiante hace la escuela, pero quien facilita el conocimiento son profesores, administrativos y directivos. Mira, cuando los estudiantes se involucran con la institución y los profesores, se crea un ambiente de aprendizaje enriquecido. Los académicos pueden proporcionar conocimientos y guía, mientras que la institución puede ofrecer recursos y oportunidades. Pero aquí está el truco: los estudiantes no son solo esponjas que absorben información. Somos parte activa de este proceso de cocreación de valor. Cuando interactuamos con los profesores, compartimos ideas y desafiamos sus conceptos, estamos ayudando a dar forma a nuestra propia educación. También podemos plantear preguntas que, a veces, incluso hacen que los profesores se replanteen sus enfoques. Eso es genial porque estamos contribuyendo a la calidad de la enseñanza.
Tiene un nivel de impacto muy alto, porque los alumnos hacen del conocimiento suyo, y el que ellos mismos creen ese conocimiento y este físicamente, hace que la motivación y confianza de los estudiantes de demostrar sus habilidades dentro de un plantel educativo aumenten ya en un nivel profesional, hacen que se sientan más identificados y cómodos con sus habilidades y conocimientos, y no dudan en aplicar lo que saben y han creado.
Considero que hasta el momento solo tenemos la parte de la autoevaluación, pero no hay tanta libertad en mejorar y cambiar nuestra propuesta de valor, y si la tenemos es extracurricular ya no es dentro de una calificación y eso llega a desanimar a querer cocrear.
Impacta mucho ya que los estudiantes ya no solo están del lado de ver como se crea el conocimiento ya que ahora también son actores, ya que también tiene más confianza y le ponen más empeño a lo que ellos generan, e impacta mucho en su relación con su nivel superior, si por parte de la universidad tener ese conocimiento, pero que el estudiante genere su propio conocimiento, por sus propios métodos hace que tenga esa motivación para seguir avanzando al siguiente nivel. Yo considero que

impacta mucho, ya que eleva la oferta y atracción al resto de las personas, considero que impacta mucho en las instituciones que el estudiante intervenga, pues mejora la imagen, reputación, la propuesta y otros aspectos que hacen que otros estudiantes puedan unirse a esa institución y puedan observar sus planes educativos y licenciaturas, haciendo que tengan más creadores de información y conocimiento y así se mejore la calidad de lo que la universidad ofrece.

Student 02

Bueno, creo que los estudiantes desempeñan un papel clave en la integración de sus conocimientos y experiencias en la propuesta de valor de la educación superior. En realidad, es como un dos en uno: por un lado, la institución proporciona recursos, como clases y materiales, pero los estudiantes también aportan sus experiencias personales, sus intereses y su esfuerzo para darle forma a su propia educación. Al final, la propuesta de valor se convierte en una combinación única de lo que la institución ofrece y lo que el estudiante hace con esos recursos.

La igualdad de acceso a la propuesta de valor de la educación superior es un tema importante. No todos los estudiantes tienen las mismas oportunidades, ya sea debido a limitaciones financieras, geográficas o de otro tipo. Creo que deberíamos trabajar en hacer que la educación superior sea más accesible para todos. Esto podría implicar políticas de becas, programas de educación en línea o colaboraciones entre instituciones para ampliar el acceso. Los gobiernos, las instituciones educativas y las organizaciones sin fines de lucro pueden desempeñar un papel importante en esta tarea.

La interacción entre los estudiantes, la institución y los académicos es fundamental para la co-creación de valor. Los estudiantes aportan su perspectiva única, mientras que los académicos y la institución proporcionan orientación y recursos. Es como un equipo en el que todos tienen un papel que desempeñar. Esta interacción enriquece la experiencia educativa y permite que los estudiantes personalicen su camino de aprendizaje.

La co-creación de valor tiene un gran impacto en la experiencia de los estudiantes. Cuando los estudiantes tienen la oportunidad de participar activamente en su educación, se sienten más comprometidos y motivados. Además, pueden adquirir habilidades prácticas y conocimientos específicos que se alinean mejor con sus objetivos personales y profesionales. En general, esto hace que la experiencia de la educación superior sea más significativa.

La personalización de la propuesta de valor varía según la institución y el programa, pero creo que es importante que los estudiantes tengan cierta flexibilidad para elegir cursos, proyectos o enfoques que se adapten a sus intereses y metas. La educación superior no debe ser "talla única". Cuanto más personalizada sea, más valiosa será para los estudiantes.

La co-creación de valor puede fortalecer las relaciones entre los estudiantes y sus superiores, ya que fomenta la comunicación y la colaboración. En cuanto a la institución, puede mejorar su reputación y atraer a más estudiantes si demuestra su compromiso con la calidad y la personalización de la educación. Además, cuando los estudiantes están satisfechos con su experiencia, es más probable que se conviertan en embajadores positivos de la institución, lo que también es beneficioso para la misma.

Faculty 01

Bueno, yo creo que es muy importante el que hoy en día tomen en cuenta las nuevas áreas académicas así como las nuevas formas de impartir tanto didactas como autodidactas, las nuevas tecnologías de información, las nuevas metodologías, intercambios, el poder implementar este tipo de cuestiones no escolarizadas y de aula para que se puedan tener mayores conocimientos, hoy en día es muy importante que se pueda tener experiencias con la vida laboral actual ya que esto abre más los horizontes de una situación laboral. El que un alumno ocupe estas metodologías educativas le va ayudar a saber cuáles serán los enfrentamientos con los que se van a topar día a día en la vida laboral. Hay licenciaturas que merecen ser muy prácticas y que se debe conjuntar lo práctico con lo académico, no todo se puede ver en las aulas sino también en el mundo laboral.

Yo creo que si hay igualdad, lo podemos ver en muchas universidades en donde sus métodos de educación han cambiado, aplicando nuevas metodologías dando rediseños a sus programas académicos exigiendo que los alumnos tengan más contacto con la vida real. Se involucran las instituciones, los directos, los académicos ya que es muy importante que estos tengan la experiencia laboral para enseñar y no solo haberse dedicado a la docencia de no ser así no podrán transmitir la experiencia a los alumnos. Yo creo que todos tienen un papel fundamental, hay alumnos que se involucran mucho en su aprendizaje, son autodidactas, incluso hay variantes en la web en donde empresas abren oportunidades gratuitas para tener diferentes áreas de aprendizaje.

Yo creo que es muy importante, no todo se le debe dejar al académico o al directivo, los estudiantes juegan un papel muy importante, pero deben de entrar en exigencias, los estudiantes deben exigir que haya nuevas técnicas, a los académicos se nos da la formación constante para que aprendamos nuevas técnicas. Hace poco se tomó un curso del aprendizaje a base de juegos, entonces nosotros tenemos que aprender a dar ese tipo de aprendizaje, que no sea todo 100% académico ni formalizado o escolarizado, sino que también los alumnos exijan a su profesor lo que quieren aprender, salidas, experiencias, etc. Los alumnos tienen un papel importante que no se debe quedar en la inconformidad.

Impacta mucho, yo con la experiencia que tengo me ha tocado ver que muchos alumnos participan en esta cocreación educativa, ya son muy talentosos, empresarios, con buenos puestos laborales y ellos han buscado ese valor de decir lo que necesitan para que el maestro investigue y logre dar nuevas áreas de aprendizaje.

Yo creo que, si se puede bastante, las instituciones deben de estar abiertas a recibir esto. Hay evaluaciones, yo creo que todos los directivos y académicos están abiertos y si no se empieza a exigir nunca se va a dar ese cambio. A nosotros nos exigen estar capacitados, yo acabo de iniciar un doctorado de una forma diferente, ya no solo es leer y leer ahora es practicar y me doy cuenta la importancia de que yo como alumno busque la practicidad y no solo la teoría.

Yo creo que, si impacta bastante porque se van a tener alumnos más capacitados, más líderes. Yo creo que ese es el punto más importante, ver más liderazgo, ver alumnos con mejores trabajos, con mayor felicidad. Yo sí creo que la felicidad es importante para cómo te desempeñas, a mayor calidad de vida, mayor felicidad tienes. A la institución educativa le impacta bastante ya que las instituciones se miden con los recursos, premios, reconocimientos, estatus, motivaciones, de indicadores, entonces las

instituciones van ganando todo esto. Además, al ver que una institución tiene esta cocreación se tiene mayor demanda ya que de alguna forma se marca que sus alumnos están siendo exitosos.

Faculty 02

Pienso que hay una gran confusión al respecto, no hay un involucramiento del estudiante. El estudiante piensa en conseguir el crédito por materia, en aprender el tema de manera de memoria y no hace por sí mismo un ejercicio de integración de los saberes con todas las materias que llevo en ese día, en esa semana, en el mes, en el parcial, mucho menos en el semestre. Es necesario trabajar de manera psicológica en primer lugar para establecer la oportunidad y establecer el compromiso que se requiere, el estudiante desafortunadamente solamente es de 7 a 2 de la tarde de 2 de la tarde a 9 de la noche y después se desconecta y quiere aprender todo dentro del aula, entonces, por principio de cuentas se requiere un gran trabajo psicológico para cimentar este factor de compromiso en los estudiantes, ese es el primer elemento, posteriormente dentro de todo lo que viene la propuesta de valor, todas las universidades, todas las licenciaturas, tienen una misión, una visión y una propuesta de valor, pero esta propuesta de valor queda rota cuando el personal que lo lleva a cabo, quien va a operar, no lo conoce, no está en esa misma sintonía y finalmente estamos generando una descomposición de todo lo que es la cultura organizacional, no quiero decir que el estudiante sea el perjudicado sino que el estudiante como receptor de toda esta cultura realmente no lo queda claro, queda confundido, no identifica hacia dónde va en una meta pero eso es una de las áreas de oportunidad que se pueden desarrollar. Lo que necesitamos es una comunicación vertical en donde realmente sea de arriba hacia abajo y viceversa en donde nosotros podamos escuchar y detectar necesidades, de lo contrario si tenemos la jerarquización de arriba hacia abajo el estudiante sólo es pasivo en el proceso.
Desde mi perspectiva no porque el estudiante es a quien menos se le consulta o menos valor se le da para la propuesta de valor, pero también es el que menos se interesa por colaborar en un desarrollo de propuesta de valor. Es un fenómeno de conocimiento, no lo conoce por lo tanto no le interesa, no lo comprende, no sabe de la trascendencia y queda fuera de este contexto. Lo vemos con los planes de desarrollo institucional, con los planes de desarrollo estatal y nacional, hay estadísticas en donde los que más participan son de 25 años hacia arriba y grados de maestría, por otro lado los estudiantes de licenciatura y preparatoria que tienen voz y voto, la realidad es que no se interesan, hay que incentivarlos, motivarlos pero aun así cuando acuden sus propuestas no están argumentadas, solo quedan en ideas y eso es algo que en muchas ocasiones cuando se tamizan no hay buenos resultados, son ideas desechadas en muchos casos. Básicamente tenemos nosotros que ver el contexto, por ejemplo, en el ecosistema de la universidad están nuestros directivos a todos niveles, están los docentes, están los estudiantes, el personal administrativo pero eso es en casa, fuera tiene que estar muy relacionado con la sociedad en la que se está impactando, en el caso de la licenciatura de mercadotecnia con los distintos emprendedores, empresarios, negocios, organizaciones, organismos de toda índole para poder dar una lectura integral de lo que está sucediendo y con esto argumentar

que tipo de profesionistas son los que requerimos no a nivel nacional sino a nivel regional porque nuestra universidad es estatal, no tiene el carácter de ser nacional

Es muy importante que el estudiante tome la decisión de colaborar, tiene que ser invitado, escuchado, evangelizado en función de lo que significa colaborar en una propuesta de valor con la finalidad de que se tome de manera seria, no tiene que ser una actividad forzosa o por una calificación, tiene que ser por convicción. Se debe de integrar desde la perspectiva de la normatividad y reglamentos que cada institución establezca, hay tiempos, hay periodos, hay formas que se deben de respetar y de convocatorias siempre y cuando se utilicen los canales adecuados.

En algo muy básico que se llama involucramiento, cuando el estudiante se siente parte de, realmente atiende más a las sesiones, a su institución, sabe que está colaborando a crear un impactando en la institución y un impacto fuera de la institución, a través del branding, a través de su compromiso, a través de actividades extracurriculares, a través de la vinculación pero necesitamos que los estudiantes se crean que puedan formar parte de la propuesta de valor porque es muy grave cuando ni siquiera conocen la misión de su licenciatura.

Es una pregunta muy compleja porque todo dependerá de la institución, dependerá de la convocatoria, dependerá de los canales de comunicación que se tengan. La personalización puede darse desde lo individual hasta lo colectivo, antropológico, de una localidad, de una colonia, de una ciudad, todo va en función de os interés de impacto, desde mi perspectiva la propuesta de valor se tiene que personalizar de manera general, pero en muchas ocasiones es muy compleja porque tenemos distintos ecosistemas en los cuales se debe encontrar un punto de homogenización.

Nos da una óptica diferente, cuando nosotros como parte de una comunidad universitaria docente llegamos a guiar esquemas, propuestas, planes que impactan a los estudiantes, a veces llegamos a tener miopía, nos olvidamos quien es el estudiante, de donde viene, qué características tiene, cuáles son sus sueños, en donde quiere estar, y tratamos de moldearlo a nuestra perspectiva cuando esto tiene que ser una propuesta emanada de 2 fuentes, por supuesto una va a ser la guía, la otra fuente enriquece a los elementos que se pueden destinar al bien común. En la institución impacta de una manera positiva ya que nosotros conoceríamos más a detalle la información de la fuente, de los estudiantes, específicamente de dónde vienen, que necesidades hay, que características son las que requieren para poder transformar el entorno de dónde vienen o en donde quieren estar, lo que quieren llegar a ser como seres humanos, como profesionistas. Esto de generar una cocreación de valor no se ciñe a una cultura organizacional nada más sino que se está reforzando semestre a semestre, cuando el estudiante universitario no tiene bien identificado hacia dónde va cuando egrese, que eso es algo muy complejo a los 18 años de obligan a escoger una carrera, a los 25 de repente decides estudiar una segunda carrera porque la primera no te gustó, significa que no hay un proceso de maduración y si nosotros no coadyuvamos a este proceso de maduración del ser humano y del profesionista o podemos entregar buenos resultados. El escucharlos siempre es algo positivo, filtrando lo que ellos nos puedan decir, no cualquier estudiante universitario del nivel que sea tiene la verdad absoluta, ni lo que opina es algo que se debe hacer o tiende a ser positivo. Debemos saber escuchar, interpretar, aplicar en función a que es lo que puede sumar.

Accrediting Agency representative, 01

Depende mucho de la institución y de las relaciones o convenios que tenga, por ejemplo, yo hace aproximadamente 2 años que me termine una maestría y considero que mi institución no me brindaba grandes herramientas ni grandes relaciones con otras instituciones y yo trabaje anteriormente en una institución que tenía posgrados con CONACIT y pues aquí podemos ver otro tipo de beneficios porque los estudiantes pueden hacer movilidad, tienen apoyos de becas, apoyos para ir a congresos, conversatorios, encuentros, mesa de trabajo, entonces yo creo que mucho depende también de la vocación de la escuela. Me queda claro que no es lo mismo una escuela que realiza investigación a una escuela más ejecutiva u otro giro, entonces ofrecen cosas de acuerdo a la misión u objetivo de la escuela.

Yo creo que depende mucho, por ejemplo la universidad autónoma del Estado puede tener ciertos beneficios que probablemente otras escuelas de educación superior que pertenecen al gobierno no tienen o las tienen en diferentes escenarios. Creo que depende del escenario en el que se desenvuelva el estudiante, obviamente si está en una escuela privada las condiciones y los beneficios de la propuesta de valor son distintos. Hasta cierto punto yo creo que los estudiantes tienen la oportunidad de acceder a beneficios dependiendo de sus instituciones, y desde su rubro. No necesitan pertenecer a algo para involucrase, por ejemplo los programas de CONACIT como lo es “verano de investigación” en donde los estudiantes se pueden ir a una institución que entre en el programa y trabajar en conjunto con un investigador para desarrollar una instigación o un artículo en el caso de que sea su área. Entonces considero que a veces tienen muchas opciones pero no las desarrollan o no acceden a los programas o beneficios por falta de información.

Yo creo que si es importante que tengan una buena relación, una buena comunicación eficiente porque justamente a través del personal académico se va bajando la información, son todas las personas que tienen más al alcance a los estudiantes y a los programas de los que se pueden beneficiar. Entonces si no hay una buena comunicación toda esta información no llega o llega a destiempo, yo creo que debe haber una buena comunicación, una buena coordinación, a veces hasta una buena relación porque también si no hasta una buena relación con el docente, a veces las cosas no salen como deberían y los resultados no son los adecuados.

Yo creo que lo ideal es que impacte de una manera positiva, que las experiencias sean gratas para que incentivemos a los estudiantes desde nuestro papel de academia, gobierno, universidad o en la instancia que estemos, creo que brindar una información positiva, que el estudiante quede satisfecho pues es un trabajo en equipo de apoyo mutuo para lograr una experiencia positiva. Si el estudiante está escribiendo un artículo, si se está yendo a un proyecto, etc., le estamos brindando todas las condiciones para que sume y para que posteriormente siga avanzando de nivel, enriqueciendo su aprendizaje personal y profesional.

Depende mucho de la visión del estudiante y del acompañamiento que le esté dando la institución, o sea creo que no se limita, ya depende de la idea que cada quien tenga y del desarrollo que se le dé y obviamente del acompañamiento que se le dé al estudiante. Depende de cual sea su visión y si tiene claro su proyecto. Podemos hablar de la propuesta de valor como de la colaboración directa que tenga, del resultado o de lo distintivo que sea el proyecto o también ya directamente de la propuesta de

valor que el brinde, de su propuesta, de su proyecto, o sea ya es dependiendo de cómo se quiera aterrizar.
Yo creo que lo ideal es que impactara de manera positiva, que tal vez con todas las experiencias que los estudiantes lleva a cabo en la educación superior puedan incentivar que los estudiantes que están por entrar a la educación superior se vean más convencidos, que tengan esas ganas de inmiscuirse y de tener éxito en su paso por la educación superior. Y yo creo que lo estamos logrando con tanta oferta educativa, creo que la competencia ha propiciado mejorar la calidad, las oportunidades y todo el desarrollo de la educación superior, toda la vinculación como lo mencionabas con el sector productivo, con gobierno, o sea todo ha propiciado que los vínculos se estrechen y pues que tengan acceso a mayores beneficios. Ya es cuestión de los jóvenes que puedan aprovechar de todo a lo que pueden tener acceso y que cada quien cree su experiencia desde su lugar, sea educación pública, privada, investigación, ya depende de cada quien y de las buenas relaciones que cada quien haga su propuesta de valor única. En la institución es un referente para los trabajos y los logros de la misma institución, ya cada quien tienen su propuesta de valor. Yo hace algunos años trabaje en una institución que fue la única en el Estado que estaba certificada en cuestiones de género e exclusividad, actualmente es algo normal pero en su tiempo no estaba en auge entonces eso en su momento era una propuesta de valor. Así como eso puede haber muchos ejemplos que benefician a la institución, que le traen prestigio que atraen a mas estudiante para cursas una carrera en esa institución.

Accrediting Agency Representative 02

En primera instancia creo que el estudiante en general, en todos los niveles educativos se tiene que ver como un ente activo, es decir él es quien construye y genera de forma principal su conocimiento. Por ende dependiendo su nivel va a depender el apoyo, ayuda y guía que va a tener del profesor, compañeros, ayuda externa, material didáctico, etc. En el caso específico del nivel superior sí creo que por la etapa del desarrollo en la que se encuentra el estudiante si toma un nivel ya más importante, es decir, aquí él ya se tiene que encontrar en una etapa de autoconocimiento con respecto a su estilo de aprendizaje, de sus estrategias que le permitan generar su conocimiento, su estructuración pero de forma principal es un ente activo que es responsable de su propio aprendizaje y su entorno es obviamente una guía que le facilita para llegar al fin.
Si pero incluso considero que es el actor que obtiene los mayores beneficios, es una relación en la que él es principal responsable dé porque va a recibir la importancia o resultados de esto. Entonces si considero que los demás tienen gran parte en este papel pero el estudiante aún más. Es un trabajo multifactorial desde el punto de vista educativo, viene desde aspectos sociales, culturales, económicos, entonces creo que una parte podría ser como una estructura académica con respecto al curriculum y todo esto que le dé la responsabilidad e importancia al estudiante y al resto de pero también creo que viene desde la parte cultural, es decir, lis estudiantes versen desde esa perspectiva y tomarlo no solamente en la teoría.
En general todo esto es un proceso activo y dinámico en el que todos los actores tienen tanto su aportación como su responsabilidad, en el caso de los estudiantes en específico creo que deben de

concebirse a sí mismos como aquellos que van a darle la mayor importancia o peso a todo su proceso y que por ende no se va a ser de una forma unilateral sino que es multidireccional, es decir, tanto la parte administrativa, política, educativa, va a poner como esta parte que les corresponde sin embargo ellos son los que realmente van a poder construir este valor propio de la educación superior y hacer por aprender respecto a su profesión y no este típico pensamiento de solo pasar por pasar. Al final es su propia educación y hasta que el estudiante no se conciba como este actor principalmente que está haciendo una construcción de su área personal creo que aunque el resto de actores lo hagan no va a ser posible.

Justo como mencionaba, al final es generar un punto de equilibrio que lo dan cada una de estas personas o de las que estén involucradas, es decir que si una de estas no aporta lo que está dentro de sus tarea, actividad o responsabilidades por ende se desestabiliza todo y ya no se llega al objetivo. Quizá un estudiante en este caso si tiene como esta responsabilidad, la conciencia de pero el profesor no, o viceversa. Entonces es un equilibrio en el que todos tienen que aportar en el mismo nivel.

Desde el punto de vista educativo los estudiantes deben de contribuir incluso en reglas, en la construcción del curso, en actividades, tareas porque en este punto ellos ya son conscientes de saber con qué enseñanzas o estrategias aprenden mejor pero también considero que hay cosas que ellos como aun no son los profesionales del área, creo que intentar hacer cambios en los aspectos meramente curriculares, es decir, objetivos, secuencias didácticas, toda esta estructura que tiene que haber para que llegar a los conocimientos ellos no podrían, quizá las tareas, las formas, las actividades, pero no como tal el tema.

Considero que es muy subjetivo dependiendo del estudiante, de sus metas propias, de sus objetivos, e incluso puede haber algunos a los que les sea preocupante o quizá no y va a haber a quienes les de igual entonces depende completamente del perfil del estudiante y sus relaciones. En teoría si se llevara a cabo sería el ideal de la educación, pero pues no es algo que se pueda ver todo el tiempo porque ese sesga por ciertos elementos casi siempre políticos, culturales, etc., pero sin duda alguna sería lo ideal.

Local public administrations

En este caso nuestro proceso y como lo mencionaba antes pertenecemos al departamento de servicio social obviamente nosotros tenemos un proceso ya establecido que se maneja digitalmente es para dar de alta las instituciones que van a ser partícipes para que el alumno vaya a realizar el servicio social ya sea a dependencias privadas, públicas y efectivamente entran las de gobierno, se realiza el acta de proyecto, tiene todo un proceso y se finaliza. Nosotros lo que podemos ayudar o avalar en este caso para el alumno es precisamente ese proceso para que vayan a realizar sus servicios sociales en tiempo y forma dentro de las instituciones ya establecidas que se mencionaron anteriormente.

Sí, en este caso sí lo puedes realizar directamente el alumno el proceso como la institución ya depende de los estándares o de los lineamientos que tenga tanto la universidad como las instituciones. Hay igualdad porque es algo muy bueno para el alumno porque no simplemente dejan que la institución haga el trabajo también los están haciendo funcionales a ellos de alguna manera, la institución educativa hace que ellos desde esos estándares los hace responsables los empieza a ayudar a pensar

a ver cómo es el camino ya en el desarrollo laboral. Los actores pueden intervenir al hacer crítica acerca de los procesos que estamos llevando de forma externa para ver qué tan viable son o qué tanto pueden ayudar a mejorar estos procesos que nosotros llevamos.
En este caso al departamento de servicio social siempre y viene establecido en lo que es su ley y reglamento con lo que nosotros llevamos acorde, es que el alumno siempre va a dar una un aporte a la sociedad entonces obviamente ese aporte pues va en conjunto porque llevamos al alumno desde el centro de estudios y lo que es gobierno porque ya dentro de todas estas plataformas pues obviamente el prestador va a realizar su servicio social.
En este caso para poder titularse porque siempre es un proceso que deben de llevar antes de poder hacer su titulación obviamente bajo sus lineamientos que efectivamente vayan a desarrollar un servicio acorde a su licenciatura, acorde muy a su perfil y que sea ese servicio social precisamente para retribuir a la sociedad y obviamente para que ellos tengan un beneficio que en este caso sería su constancia de servicio social para posteriormente titularse.
En este caso nada más sería como lo mencioné al inicio únicamente por el proceso de servicio social para nosotros como departamento más adelante pues obviamente será con las demás áreas.
Eso ayuda en sus beneficios, en sus conocimientos y ver hasta qué nivel como estudiante podemos aportar, podemos ayudar y ver qué tanto realmente nos está sirviendo nuestra licenciatura. Hasta qué nivel, hasta qué etapas o qué procesos nos está dando tanto los académicos, como qué alto nivel de estudios tenemos y que podemos hacer por la sociedad realmente. Para la institución yo lo veo como un beneficio, realmente como lo mencionaba anteriormente porque saliendo de la universidad obviamente ustedes van a buscar un trabajo que sea fructuoso, obviamente bajo su perfil y que a lo mejor ya van conociendo esos estándares que nosotros estamos llevando como lineamientos, como lo es el de responsabilidad, qué tenemos que llegar a ciertas horas a trabajar, cuáles son nuestras funciones, en qué pueden ustedes apoyar, en qué pueden aportar, qué beneficios se pueden dar. Además, todo lo de la tecnología pues va avanzando cada día más obviamente, Hay personas realmente en gobierno o me incluyo que no sabemos manejar al 100% las tics como lo están manejando ustedes entonces obviamente es que ustedes nos retroalimenten como nosotros los podamos retroalimentar.

Families of the students

Yo no pise una carrera universitaria, sin embargo, tengo hijos egresados y en carrera y es más que nada el hecho de que se les pide muchas veces experiencia y conocimiento, pero claro está que como personas públicas que están al frente de instituciones les tienen que dar esa oportunidad porque si no como van a crear una experiencia, yo no lo viví de cerca pero si con mis hijos. Entonces es el hecho de abrir un poco más el campo a los jóvenes, a los universitarios y a los egresados porque pues muchas veces salen con dudad y hasta con miedos de a donde se van a integrar o en donde van a poner sus conocimientos en práctica, entonces pues obviamente se tiene que trabajar mucho en la educación. Yo con hijos de carreras como arquitectura y mercadotecnia afortunadamente pues mi esposo tuvo cargos públicos y fue así como los acomodo más sin embargo yo vi como muchos de sus compañeros

se tardaron la vida en encontrar trabajo. Entonces si es preocupante que ustedes como jóvenes, que son demasiados, si les abran el campo para poder empezar a trabajar y producir.
No hay mucha participación para los jóvenes, una, dos, afortunadamente en el ámbito en el que yo estuve que fue desde casa, desde ver a mis hijos crecer, desde un kínder hasta un tema universitario, se tuvieron las facilidades no tanto así el campo de sus compañeros que estuvo muy cerrado. Lo tiene complicado el universitario si no tienen ese apoyo. Yo creo que los actores necesitan tener sensibilidad porque en alguna vez todos fuimos estudiantes y en muchas ocasiones no se tiene el dinero ni para transportarse. No todos cuentan con esas oportunidades, yo creo que gobierno tiene que trabajar más en cuestión de educación porque a mi parecer aquí en Pachuca la educación la veo muy pobre. Mis hijos son de escuelas particulares y la diferencia es abismal, entonces yo creo que las personas que estuvimos en escuelas de gobierno presentamos muchas dificultades, no todos tuvimos papás que nos pudiera apoyar o hasta hacer sacrificios.
Tener empatía por nuestros jóvenes, los que ya estamos en trabajos olvidamos que en algún momento estuvimos en su lugar. Yo fui una afortunada que después de terminar mi servicio social comencé a laborar en el mismo lugar pero no para todos es así.
Si el estudiante va arrastrando problemas desde pequeño, con el paso de los años se le va dificultando más y más. Es el hecho de que como adultos incluso con palabras de apoyo podemos hacer mucho.
Yo que todavía tengo hijos estudiando y con dificultades económicas que presento mi familia, sé que es difícil pero no imposible. Al final de cuentas yo como madre tuve que hacer un esfuerzo para motivar a mi hijo para que continuara con sus estudios porque es lo que le va a ayudar en un futuro.
Es hacer un conjunto entre los jóvenes y los que ya tenemos marcado un camino, hay que apoyarlos y abrirles el campo tanto visual como económico porque sin dinero cuesta mucho trabajo. Hay una gran diferencia entre estudiantes de escuela de gobierno y de particular. En la particular es un poco más sencillo en donde les puedes exigir a los maestros.

University council 01

Creo que la integración de conocimientos, experiencias y otros recursos en la propuesta de valor de la educación superior es un proceso fundamental para el desarrollo integral de los estudiantes. Como resultado de esta integración, los estudiantes no solo adquirirán conocimientos teóricos, sino que también tendrán la capacidad de aplicarlos a situaciones reales y relacionarlos con sus experiencias personales y profesionales. En este sentido, la propuesta de valor de la educación superior se transforma en una serie de ventajas exclusivas que las instituciones universitarias brindan a sus estudiantes. Creo que es fundamental que los estudiantes puedan conectar lo que aprenden en las aulas con sus vidas diarias y sus carreras profesionales. Esto mejora su formación académica y les da las habilidades necesarias.
Depende, en la actualidad, la igualdad de acceso a la propuesta de valor de la educación superior es un tema importante. Lamentablemente, algunos estudiantes no tienen las mismas oportunidades para acceder an una educación superior de alta calidad. Esto puede deberse a diferencias culturales, socioeconómicas o geográficas. Sin embargo, para garantizar la igualdad de acceso, es esencial que

las entidades educativas, las entidades gubernamentales y la sociedad en su conjunto colaboren entre sí.

La cocreación de valor en la educación superior, es como el trabajo colaboratio no? depende de la interacción entre los estudiantes y los actores como la institución y los académicos. Al proporcionar un entorno en el que los estudiantes puedan participar activamente en su aprendizaje, los profesores y la institución juegan un papel fundamental. Esto implica no solo la transmisión de información, sino también la promoción de la reflexión, el pensamiento crítico y el desarrollo de habilidades prácticas. Es por eso que los académicos y la institución deben estar dispuestos an escuchar las necesidades y expectativas de los estudiantes, ajustar sus enfoques pedagógicos y permitir que los estudiantes participen en la toma de decisiones académicas. El trabajo en equipo mejora la experiencia educativa y contribuye a la creación de valor en conjunto.

En mi opinión, tiene un gran impacto en las experiencias de los estudiantes en la educación superior. Los estudiantes se sienten más comprometidos y motivados cuando participan activamente en la construcción de su propio conocimiento y en la toma de decisiones relacionadas con su educación. Esto mejora su aprendizaje y les permite desarrollar habilidades de pensamiento crítico y resolución de problemas.

Desde mi punto de vista, creo que los estudiantes tienen una gran cantidad de libertad para personalizar sus propuestas de valor de la educación superior. Esto se ve reflejado en cómo elegir una carrera, elegir un curso, participar en actividades extracurriculares y buscar oportunidades de aprendizaje experiencial. Ofrecer una amplia gama de opciones académicas y recursos de apoyo es algo que las organizaciones deben hacer para facilitar esta personalización. Los estudiantes pueden elegir rutas académicas que se adapten a sus intereses y metas individuales, lo que resulta en una experiencia educativa más enriquecedora y relevante para cada uno.

Creo que también tiene un impacto en las relaciones de los estudiantes a nivel superior. Cuando los estudiantes tienen la oportunidad de participar en la toma de decisiones académicas y se sienten valorados, desarrollan un sentido de pertenencia y compromiso con su institución. Esto puede hacer que su relación con la institución sea más fuerte y leal a largo plazo. Además, tener estudiantes más comprometidos y satisfechos beneficia a las instituciones educativas, lo que puede aumentar la retención de estudiantes y la reputación de la institución. Por último, pero no menos importante, la cocreación de valor es una táctica que beneficia tanto a los estudiantes como a la institución educativa en su conjunto.

University council 02

Yo creo que en la capacidad que ellos tienen de investigar, por ejemplo, en la capacidad que se tiene de poder observar, describir y valorar las brechas que encuentran en sus proyectos de empresas cuando estos los desarrollan por ejemplo de manera real y cuando ellos traen bajo ese canal o bajo ese mecanismo de trabajo de escuela al seno de la academia creo que están aportando o acercando observación que nos permite entonces poder desarrollar o aterrizar principios académicos.

Debido a que los estudiantes no son como los clientes, el estudiante es el que recibe, es el que se forma y hay otros actores que realizan estudios de pertinencia, factibilidad, dimensionan la naturaleza

de los problemas y con base en eso construyen o se construyen los constructos y se desarrollan los contenidos temáticos. Creo que al alumno se le ha visto más como el beneficiario y creo que son actores importantes en el proceso porque pueden ayudar y expresar sus necesidades y problemas. Para lograr la igualdad, se debe involucrar a los estudiantes y respetar las perspectivas de todos los actores en el proceso. Además, la perspectiva del empresario en cuanto an expresar sus necesidades es fundamental, lo que el académico de tiempo completo o el investigador puede investigar y descubrir o construir para ese beneficio también es importante. Sin embargo, los alumnos tienen tendencias o perspectivas que pueden agregar al proceso. Entonces, creo que es importante poder describir y valorar la perspectiva del cliente visualizando al alumno como la persona que se va a formar y a quien vamos a concentrar todos los esfuerzos porque el alumno es como el producto y puede decir lo que se generará.

Esque desde la primaria, creo que debemos concentrar nuestros esfuerzos en los estudiantes. Creo que enfrentar a los estudiantes nos permitirá desarrollar ciertas habilidades y capacidades. Me gustan las formas en que los estudiantes realizan prácticas, servicios sociales, proyectos e integración de productos en cada semestre, ya que esto les permite ampliar su perspectiva y enfocarse de manera más amplia. En realidad, estos mecanismos son el núcleo de lo que todos los actores realizan académicamente

Como lo mencioné anteriormente, creo que el "conocimiento fundamental" es el proceso clave y creo que deberíamos desarrollar mecanismos o herramientas para evaluar no solo conocimientos sino también habilidades, capacidades blandas, entre otras características de los estudiantes que nos permitan ser más integrados y, por lo tanto, más competitivos, competencias en el ámbito laboral que les permitan enfrentar sus desafíos en el trabajo.

Hasta el punto de que se los permita el modelo o mecanismo bajo el cual se están direccionando las personas que están planeando o desarrollando las propuestas o los estudios con relación a los contenidos temáticos. Pero bueno, ciertamente el alumno está en un rol de formarse, ya hay metodologías que están probadas, hay mecanismos que están validados y pues el alumno en cierta etapa de su proceso le toca estar observando, le toca estar conociendo, reconociendo, en semestres más adelantes pues al alumno le va a tocar estar valorando y pues si de alguna manera expresando, sentires o perspectivas y creo que ya en los últimos semestres, cuando tenemos fundamentos o bases, el alumno podría estar desarrollando. Creo que, independientemente del semestre y del conocimiento y la habilidad que el alumno vaya adquiriendo, no hay límites a lo que el alumno puede aportar. Creo que no hay límite; creo que no hay límite en la medida en que se entienda y valore la contribución de los estudiantes y podamos adaptarnos. Sin ser demeritorio de los primeros a los últimos semestres, creo que cada estudiante, independientemente de su nivel de conocimientos, es valioso en el semestre en el que se encuentra su perspectiva.

En lo fundamental, creo que la iniciativa privada tiene una ventaja sobre los estudiantes de las escuelas públicas porque permite que los estudiantes se relacionen mejor, interactúen más y la educación es un poco más particularizada. Me encantaría lograr eso con mis alumnos, pero es complicado un grupo de 30 o 40 estudiantes aprenderse el nombre de todos. La permeación de un grupo de 5 a 10 personas no es igual a la permeación de un grupo de 35 personas. El impacto en la institución educativa es evidente y creo que ya influye más en el desarrollo de estrategias académicas y las políticas que la

institución plasme y haga seguir por los mismos académicos, coordinadores y alumnos para garantizar niveles cada vez más altos de competitividad porque puedo usar metodologías como análisis de casos y formar equipos de trabajo para que resuelvan o generen aprendiendo.
Non-Profit Organizations Considero que lo hacen mediante información, ya que tienen mayor acceso a ella para realizar proyectos, investigaciones. Y esto permite realizar exposiciones, tesis, tesinas, aportaciones para una revista científica, etc. No, porque involucra estabilidad financiera, social, y otros factores como psicológicos, de desarrollo (si existe al apoyo económico de los padres o no, cambia el desarrollo), Dentro de la escuela se deben de involucrar todos los actores, porque desde los profesores, deben de tomar en cuenta que no todos los alumnos tienen la misma perspectiva, y al adaptarse a los estudiantes, se podrá impartir un conocimiento más personalizado y en igualdad de condiciones para cada estudiante. Es muy importante porque todo es como una cadena, lo que afecta a uno, afecta a otro, los administrativos no se pueden deslindar de lo que pasa entre estudiantes y profesores, un profesor no puede hacer solo un ejemplo y hacer poco diversificado su clase, porque hay alumnos que no lo van a entender, es como si quitaras un bloque de una pila y esta se cae. Impacta mucho, por ejemplo, en el salón de clase, un profesor para hacer más variada su clase debe de interactuar con sus estudiantes, para que este se sienta más involucrado y parte de la enseñanza, y pueda analizar e involucrar ese conocimiento a su vida. En el sentido de que los estudiantes sean estables tanto en el sentido financiero, social, psicológico, involucra todo para que esta se pueda personalizar. Puedo decirte que, en realidad, los estudiantes tienen un margen bastante amplio para personalizar sus propias propuestas de valor en la educación superior. Todo depende de lo que quieran lograr y de las oportunidades que aprovechen, por ejemplo la elección de la universidad y el programa de estudios ya es una forma de personalización. Los estudiantes pueden seleccionar instituciones y carreras que se ajusten a sus intereses y objetivos. Luego, dentro del programa, pueden personalizar aún más su experiencia eligiendo cursos electivos, concentraciones o especializaciones que les apasionen. En el que se pueden desenvolver más rápido y absorber el conocimiento de una forma más amena, ya que el profesor se sentirá más en contexto, y los alumnos se apegarán más a lo que se ve más familiar. La participación más de los alumnos, y más a pego a la institución, tendrán la identidad de la universidad, van a crearse vínculos especiales con la institución y el estudiante.
Non-profit organization 02

Aunque no entiendo bien el tema de la educación superior, en mi experiencia, creo que la integración de conocimientos, experiencias y otros recursos en la propuesta de valor de la educación superior es esencial. Los estudiantes no solo buscan adquirir conocimientos académicos, sino también adquirir habilidades prácticas, adquirir experiencia y establecer conexiones significativas que les permitan tener un impacto en sus vidas y en la sociedad en general. Las instituciones de educación superior deben brindar a sus estudiantes una experiencia educativa centrada no solo en la transmisión de conocimientos, sino también en la promoción de la aplicación de estos conocimientos en situaciones del mundo real.

La igualdad de acceso a la propuesta de valor de la educación superior es un tema importante aunque complejo. Desafortunadamente, en varios lugares del planeta, existen obstáculos económicos, sociales y geográficos que obstaculizan el acceso justo a la educación superior. Esto genera disparidades significativas en cuanto a las oportunidades de crecimiento personal y profesional. Es fundamental que los gobiernos, las instituciones educativas y las organizaciones no gubernamentales trabajen juntos para proporcionar becas, programas de apoyo y recursos que eliminen estas barreras y brinden igualdad de oportunidades a todos los estudiantes, independientemente de su origen socioeconómico.

En mi opinión, la interacción entre los estudiantes, la institución y los académicos es esencial para la creación colaborativa de valores en la educación superior. Los estudiantes deben tener la oportunidad de participar activamente en su educación, colaborando en proyectos, estudios y actividades extracurriculares con profesores y otros estudiantes. Esto les permite desarrollar habilidades prácticas y aplicar lo que aprenden en el aula a situaciones reales. Además, la comunicación abierta y la retroalimentación constante de todos los involucrados mejoran la calidad de la educación y la capacidad de adaptarla a las necesidades cambiantes de los estudiantes.

Aunque no estoy muy seguro de lo que es la creación colaborativa de valores, creo que tiene un gran impacto en las experiencias de los estudiantes en la educación superior. Debido a que les da la oportunidad de sentirse empoderados y comprometidos con su aprendizaje, se sienten más satisfechos y motivados. Los estudiantes se sienten más conectados con la institución cuando pueden contribuir a la definición de su propia experiencia educativa y ver que sus contribuciones tienen un impacto real. Cuando se gradúan, se sienten más preparados para enfrentar los desafíos del mundo real.

Los estudiantes deben ser capaces de adaptarse a sus propuestas de valor de la educación superior en la medida de lo posible. Esto significa que deben tener la libertad de elegir cursos y actividades extracurriculares que se ajusten a sus intereses, objetivos y necesidades particulares. La personalización permite atender las diversas necesidades y aspiraciones de cada estudiante, ya que no todos los estudiantes son iguales. Pero esto debe hacerse dentro de ciertos límites para que los estudiantes adquieran una base sólida de conocimientos generales que los preparen para el mundo laboral. Las relaciones de los estudiantes con su institución y con la institución misma mejoran cuando trabajan juntos. Además, recibir comentarios y comentarios útiles de los estudiantes beneficia a la institución, lo que puede conducir a mejoras significativas en la calidad de la educación y en su reputación en el mercado. Finalmente, una institución educativa que promueve la creación

colaborativa de valores tiene más probabilidades de retener a sus estudiantes y mantener su relevancia en un entorno educativo en constante cambio.
Siempre que se colabora se tiene un impacto positivo en las relaciones de los estudiantes con su institución educativa y en la institución misma. Cuando los estudiantes se sienten valorados y tienen la oportunidad de contribuir a la mejora de la institución, desarrollan un sentido de pertenencia y lealtad. Además, la institución se beneficia al recibir valiosos aportes y retroalimentación de los estudiantes, lo que puede conducir a mejoras significativas en la calidad de la educación y en su reputación en el mercado. En última instancia, una institución educativa que fomente la co-creación de valor es más propensa a retener a sus estudiantes y a mantener su relevancia en un entorno educativo en constante evolución.

Alumni

Como licenciada en mercadotecnia y gerente de una empresa, considero que los estudiantes integran sus conocimientos, experiencias y otros recursos en la propuesta de valor de la educación superior de manera fundamental. La propuesta de valor en una institución universitaria es esencial para atraer y retener a los estudiantes, y esta propuesta se enriquece cuando los estudiantes pueden aprovechar al máximo sus conocimientos y experiencias.
Yo creo que sí porque todos tenemos la oportunidad. Existen diferentes instituciones para todos los niveles académicos y económicos, es importante conocer que existen instituciones públicas que brindan beneficios a los alumnos que buscan la oportunidad de generar conocimientos pero que no cuentan con la economía. Todos tenemos el acceso, pero se debe buscar para alcanzar el objetivo. Los actores que podrían intervenir son principalmente gobierno para que brinde más becas a estos alumnos que no tienen la posibilidad y que buscan tener un conocimiento e igualmente profesores independientes a instituciones públicas o privadas.
Conforme a los profesores, un alumno debería de tener la facilidad o confianza de acercarse a ellos para informarse las capacidades que deberían adquirir o acercarse al gobierno para buscar apoyo para seguir estudiando. Se debe buscar apoyo de los actores que quieran ayudar, pero La interacción entre el estudiante, la institución educativa y los académicos es fundamental para la co-creación de valor en la educación superior. Esta colaboración efectiva entre estos actores desempeña un papel esencial en la calidad de la experiencia educativa y en la maximización de los beneficios para todos los involucrados.
En un nivel muy alto ya que la cocreación busca generar una innovación, expandir y hacer crecer la idea para que se actualice a las tecnologías, conocimiento, tendencias que se tienen actualmente. Siento que cuando los estudiantes sienten que están contribuyendo activamente a su propia educación, se vuelven más comprometidos y motivados y como que así se impulsa la responsabilidad personal y el interés en el aprendizaje, lo que puede llevar a un mejor rendimiento académico y que estes como mas feliz.
Hasta el punto de que las instituciones lo permitan debido a las pautas y normas que se deben seguir. Para crear una regla se deben seguir ciertos pasos, es importante crear, innovar y soñar, pero todo

hay que plasmarlo, para poder llegar a lógralo. Yo creo que cuando Los estudiantes tienen un grado significativo de flexibilidad y capacidad para personalizar sus propuestas de valor en la educación superior, y este nivel de personalización puede variar según la institución y el programa académico en el que estén inscritos.
En la creación de la idea porque entre compañeros podemos compartir una idea o una innovación y está en nosotros poder de nuestra parte para plasmarla. En la institución educativa impacta de buena manera porque en el caso de una institución como la UAEH apoyan la creación de nuevos proyectos y hacen que abramos nuestra mente. Ellos mismos nos brindan las oportunidades de nosotros crecer.

Alumni 02

Conforme a lo que voy viendo y aprendiendo en mi universidad, las experiencias, creo que cada conocimiento va enfocado a un fin y ahí es donde los ponemos en ejecución, es lógico entender que no todos los conocimientos que tenemos los podemos emplear. Bueno y desde mi perspectiva en una organización sin fines de lucro, creo que los estudiantes tienen un papel crucial en la creación de su propia propuesta de valor en la educación superior. Es un proceso que va más allá de simplemente asistir a clases y obtener un título.
Los estudiantes, cuando se involucran activamente, tienen la oportunidad de integrar sus conocimientos y experiencias de maneras realmente únicas. Por un lado, pueden elegir cursos que les interesen y se relacionen con sus pasiones y metas. Esa elección consciente les permite adquirir conocimientos específicos y desarrollar habilidades que son relevantes para su futuro. En primer lugar, el acceso a la educación superior a menudo está vinculado a factores socioeconómicos. Algunos estudiantes pueden enfrentar barreras financieras para ingresar a la universidad o para aprovechar oportunidades extracurriculares que mejorarían su experiencia. También hay desafíos relacionados con la igualdad de oportunidades. No todos los estudiantes tienen las mismas oportunidades para participar en actividades extracurriculares, pasantías o proyectos de investigación, lo que puede limitar su capacidad para desarrollar una propuesta de valor única.
Yo creo que depende de cada estudiante, hay algunos que saben más acerca de un área que otros y si en conjunto emplean sus conocimientos se puede hacer grandes cosas. Tal vez ser más dinámicos a la hora de enseñar en las escuelas ya que cada estudiante tiene una percepción diferente. Por ejemplo, cuando los estudiantes y los académicos se involucran en conversaciones abiertas y colaborativas, se produce una especie de magia. Los estudiantes pueden expresar sus necesidades y expectativas, y los académicos pueden adaptar sus métodos de enseñanza y los programas de estudio para satisfacer esas necesidades. Esto hace que la educación sea más relevante y efectiva.
La institución también desempeña un papel importante. Puede proporcionar recursos, como instalaciones, tecnología y apoyo financiero, que permitan a los estudiantes y académicos llevar a cabo proyectos innovadores y de investigación. Esto amplía aún más las oportunidades de co-creación. Yo creo que cuando los estudiantes están activamente involucrados en la co-creación de su educación, se vuelve mucho más significativa. No es solo una cuestión de absorber información, sino de construir conocimiento de manera conjunta. Esto significa que los estudiantes no solo se gradúan con un título,

sino con habilidades prácticas y una comprensión más profunda de su campo. Además, tal vez les permite personalizar su experiencia.
Es un intercambio reciproco ya que tanto los actores como el estudiante aprenden y conocen uno del otro, así ambos pueden crecer potencialmente en las áreas que les compete. Que pueden reforzar todo lo que ya saben, conocer más áreas de oportunidad, competir en el campo laboral y sobre todo no quedarse estancados.
Yo creo que depende de su ambición del hasta donde quieren llegar, no es lo mismo el pensamiento de una persona que no sale de su zona de confort que una que si quiere crecer y salir adelante. Que sin darte cuenta los que te rodean se vuelven tu competencia y es ahí donde te darás cuenta para que este hecho. En este punto tus superiores se dan cuenta quien son los destacados y en algunas ocasiones te muestran las oportunidades laborales o te recomiendan a colegas que son parte del gremio.

Trade unions 01

El estudiante se incorpore a las instituciones gubernamentales o no gubernamentales o descentralizadas como es el caso de CITNOVA en donde se les ofrezca distintos programas para que ellos puedan elegir el programa que más les interese con la idea de que hagan acopio de conocimientos en técnicas de información, técnica científica para que ellos puedan desarrollar su potencial, por ejemplo, aquí tenemos 4 áreas muy importantes como lo es el desarrollo científico dirigida por Antonio Espeitia y ahí se tienen varios programas en donde los alumnos pueden desarrollar sus capacidades para sacar una tesina o algún proyecto o una tesis que es algo más serio. Yo creo que ahí es donde está la contribución del alumno, al generar algunas cosas novedosas para que la institución también sea beneficiada.
Aquí todos los alumnos que llegan son iguales, hay equidad, los alumnos no tienen trato preferencial, no importa la institución educativa de la que provengan. Nosotros tratamos de cuidar el concepto de igualdad, igualdad de género, que el 50% de las personas que ingresen a realizar cualquier actividad sean 50% mujeres y 50% hombres. Para nosotros es muy importante. Yo creo que debe haber protocolos que garanticen esa igualdad en el trato, sin importar las características que tengan. Deben de tratados de forma igualitaria en cuanto a la asimilación de conocimientos. Si no hay protocolos, no hay garantía.
La relación es directa, de tal manera que los directores quienes son científicos, y por lo tanto la relación que tienen con sus personas o alumnos, es directa. la interacción entre el estudiante, la institución y los académicos es esencial para integrar recursos y fomentar la co-creación de valor en un centro de tecnología. Esta colaboración promueve la innovación, enriquece la experiencia educativa y prepara a los estudiantes para enfrentar los desafíos del mundo tecnológico en constante evolución.
La relación que se tiene aquí es desde el punto de vista de ética, de moral, entiéndase la ética como una parte del conocimiento en donde se da una explicación de los valores morales. También se cuidan los valores y las costumbres. Aquí un valor agregado es la parte ética y otro es la parte moral, que aquí cuando reciban los conocimientos se van a recibir desde estos puntos de vista.

De hecho los estudiantes deben tener un proyecto, si ese proyecto personas cae dentro del espectro de conocimientos que nosotros manejamos o que estamos desarrollando, él puede desarrollar su propuesta bajo la asesoría de un científico o desarrollador tecnológico. Y aquí la cocreación surge con el apoyo de los recursos materiales y la tutoría en donde se comparten créditos.
Va nutrido, al final de su etapa y va fortalecido en la parte de conocimientos. Se tiene una relación buena en su lugar de estudios, con sus maestros, compañeros y los conocimientos y relación que tienen con su institución. Los alumnos hacen una tesis que finalmente es un trabajo científico y serio que dejan los alumnos. A la institución impacta muy bien ya que estamos contribuyendo en la formación de ese individuo que podría salir con los conocimientos para pensar en convertirse en un especialista en el tema o motivado para realizar una maestría o un doctorado dentro o fuera del país. Entonces nuestra preocupación es crear recursos humanos de elevada calidad, que esos alumnos se puedan ir al extranjero o a nivel nacional y regresen a las instituciones de origen y con ello devolver los conocimientos.

Trade unions 02

Aquí estamos hablando de valor y de instituciones educativas, desde mi punto de vista en donde también he sido académico, el sistema educativo en México está muy normado por la métrica, es decir tú no puedes medir el conocimiento de un estudiante con un número, un 10 realmente no representa nada en lo aplicativo como el trabajo en la industria, en las empresas, en las instituciones, en las dependencias de gobierno, en el sector privado. Entonces aquí el sistema educativo yo lo veo muy atrasado en la generación de ambientes de aprendizaje para estimular la co-creacion de valor, no hay un estímulo, no hay un ambiente de aprendizaje especifico que te indique a ti como estudiante realmente que se va a aplicar en el campo laboral, es decir, un 10 no me dice nada, si realmente voy a llevar bien a cabo las ejecuciones en mi entorno laboral o un 8 tampoco me dice que voy a ser un profesionista regular en mi entorno laboral. Entonces aquí el valor de cocreación pues falta estimularlo en las instituciones de educación superior, no hay estimulo en México, no hay la generación de ambientes de aprendizaje, no hay el aspecto pedagógico, no hay la ruta crítica para formar a los especialistas en el campo laboral. Estamos muy atrasados.
En México no hay igualdad de acceso, de hecho algo que se está peleando mucho y que está en la constitución es que la educación es laica y gratuita y sabemos que realmente no lo es, nos piden cuotas voluntarias, cuotas de inscripción y no se obedece a una gratuidad, entonces ahí no hay un acceso igualitario porque estoy menospreciando a la clase que realmente no tiene para pagar una inscripción, únicamente tienen acceso a la educación las personas a partir de la clase media baja pero los que realmente estar en extrema pobreza no se les garantiza la educación gratuita porque no existe la gratuidad. Los gobiernos deben de enfocarse a limitar esta brecha económica para garantizar específicamente el ingreso y la igualdad y con esto se va a fomentar un valor en las instituciones, el valor de la co-innovación, porque la co-innovación va relacionada con la intención que tienen las universidades en formar capital humano de calidad. Ya mencione que una seria garantizar la gratuidad de la educación, otra seria enfocar los programas educativos con generación de ambientes de

aprendizaje idóneos, es decir si un estudiante de ingeniería tiene que estudiar toda su vida matemáticas no quiere decir que toda su vida la va a aplicar en su entorno de trabajo, tiene que haber ambientes de aprendizaje adecuados para el puesto en el que el recurso humano se va a formar. Por ejemplo en mercadotecnia, los procesos administrativos o los procesos de emprendimiento, hay procesos de emprendimiento que involucran fórmulas matemáticas, realmente esos ustedes no los van a aplicar en mercadotecnia, ustedes se van a enfocar al campo de mercado, entonces son cuestiones diferentes, sin embargo también hay que adecuar los programas educativos de acuerdo a la especialidad de cada carrera o en el campo de acción en el que se va a laborar.

La integración de recursos va de la mano con la formación académica, si en tu formación académica de cualquier carrera no se están involucrando los docentes como guías o tutores de la enseñanza y aprendizaje, sino hay esa colaboración no puede haber una cocreación de valor, es decir, tradicionalmente la educación es llega el docente, escribe en el pizarrón y el estudiante solamente escribe, ahí no hay interacción. La interacción tiene que ser en realidad, hablaba anteriormente de la generación de ambientes de aprendizaje, esta cualidad pedagógica se tiene que implementar, ya se está implementando en programas educativos en donde se integra la relación docente- entorno laboral en el que se está capacitando- estudiante. Entonces la interacción actualmente creo que ya se está mejorando en este aspecto sin embargo hay que seguir innovando y mejorando en el proceso de enseñanza y aprendizaje.

Aquí si hay que catalogar por instituciones educativas, omito nombres, hay instituciones educativas en las cuales nosotros hemos tenido la oportunidad de participar y evaluar inclusive, somos evaluadores también de programas educativos, hay programas que carecen de esta formación de la cocreación de valor, sin embargo hay otros programas educativos que impulsan más allá de la cocreación. Muchos piensan que las instituciones privadas tienen esta cocreación de valor con valor de emprendimiento, la co-innovación, el co-emprendimiento, hay instituciones educativas particulares que garantizan este proceso de enseñanza pero la publicas no se quedan atrás, hay instituciones educativas que si van de la mano con este impulso en la generación de ambientes de aprendizaje que van enfocados hacia la creación de valor. Y la relación con los estudiantes va de la mano con las practicas, lo reportes que realicen o inclusive las actividades y tareas que les dejen.

Aquí a partir de que llega el nuevo presidente, se crea la nueva escuela mexicana y aquí hay un apartado en el que el estudiante propone sus propuestas de valor y no solo eso sino que también propone su progreso de aprendizaje, es decir, todos los programas educativos tienen materias optativas en la cual el estudiante aporta el conocimiento que adquirió con la idea que ya trae para aplicarla a su campo de trabajo. Ese es un acierto que se le da al sistema, sin embargo, hay que seguir adecuando estos programas educativos para que el estudiante pueda proponer más allá, esto en la educación superior a nivel licenciatura todavía está muy limitado, sin embargo ya en los posgrados como maestrías, doctorados y especialidades, ahí si el alumno propone al 100 su propuesta de co-valor. En las licenciaturas hay que motivar al mismo sistema educativo para que le permita al alumno dar a conocer sus propuestas, sus ideas y sobre todo que lo dejen moverse solo porque todavía está limitado por el tutor o el docente. En un nivel posgrado a mayor libertad de esparcimiento y aprendizaje, incluso el propio alumno va creando su propio conocimiento, y eso incluso no se puede en todos los posgrados pero si en la mayoría.

Depende del tipo de institución educativa, hay algunas que tienen una enseñanza muy clásica. Como ya mencionaba, la educación lamentablemente en México se sigue evaluando con un número que no te dice nada, si vas a ser eficiente o no en tu campo labora. Entonces, como impacta pues igual depende mucho de la presencia docente, hay docentes muy tradicionalistas que no generan ambientes de aprendizaje, se casan en el aspecto lineal de la educación y hay otro docentes que tienen la habilidad para generar ambientes de aprendizaje, son especialistas en el área y en la materia y pues estos impactan de manera significativa en el aprendizaje del estudiante, entonces es depende de la institución y e los docentes. Hay programas educativos, inclusive el sistema de la nueva escuela mexicana que ya permite que se evalúen a los docentes pero se omiten los aspectos de co-valor, co-innovación, co- emprendimiento, únicamente te preguntan si el profesor es bueno, si sus clases son buenas, si te gusta su clase y ya, no tocan esos aspectos de valor, esas evaluaciones que se hacer a los docentes y al sistema educativo, tienen que incluir las palabras y otras palabras claves como generación de ambiente de aprendizaje, emprendimiento, ideas, estrategias de enseñanza y aprendizaje, aspectos pedagógicos, o inclusive las líneas de acción en las que el futuro profesionista se tiene que especializar. La cocreación de valor está limitada. Una institución como CITNOVA se enfoca más en estudios de posgrado en donde no se ve limitado a su inventiva, emprendimiento, creación o incluso talento. Hay igualdad en el acceso, hay una co-creación de valor, todos tienen acceso, pero claro, se pide un reintegro, que el apoyo que se da se reintegre aplicando el conocimiento que adquirieron en otra institución.
Employer 01 Creo que una de las principales situaciones que están sucediendo con los egresados es que les falta mucha disciplina, y muchas habilidades blandas, ya que no se desarrollaron, entonces tenemos problemas con los empleadores. Si, si tuviese, solo que necesita un poco más de actitud, no todo es del lado de la institución, sino que debe ser más del lado de la persona. -Los docentes, es el primer actor que debe de fomentar que competencias deben de darse, sin embargo, no se está dando ese proceso, pero es cuestión de actitud y disciplina, no todo está en el aula, y no todo está con el docente. Sino que hay cosas que se deben de ver, contenido que a veces ni siquiera llega a los docentes. El que viene a formarse también tiene cierta responsabilidad, también le docente porque esta frente a grupo y tiene la obligación de desarrollar competencias, pero también el alumno porque si no se quedará estancado. Lo más importante es que los docentes deben de estar al pendiente de que es lo que está sucediendo en el mercado laboral, porque desafortunadamente muchos de los programas académicos están hechos desde hace mucho tiempo entonces no podemos seguir con eso, hay que estar a la vanguardia. No todo lo tiene el docente, y también hay otras fuentes, esto desarrolla habilidades. Y el docente como los estuantes deben de emular los conocimientos unos y otros, y el docente no es el dueño del saber, pero se necesitan de habilidades blandas, que la más importante es trabajo colaborativo, liderazgo, desarrollo profesional, pensamiento crítico, juicio, toma de decisiones.

Estas habilidades blandas deben darse desde el salón de clases, debemos de desarrollar esa competencia, también debemos de desarrollar otro tipo de competencias como el escuchar (que me preguntas, que contesto, y de donde saco la información). Creo que por ejemplo Cuando los estudiantes participan activamente en su proceso de aprendizaje y tienen la oportunidad de dar forma a su experiencia, se vuelven más comprometidos y motivados. Esto se traduce en un mejor rendimiento académico y en habilidades que realmente importan en el mundo laboral, como la resolución de problemas, la comunicación efectiva y el trabajo en equipo. Además, la co-creación de valor permite a los estudiantes alinear su educación con sus objetivos profesionales. Pueden elegir cursos y proyectos que se adapten a sus intereses y metas, lo que los prepara mejor para el mundo real. Cuando llegan al mercado laboral, están más preparados y motivados para enfrentar los desafíos. Deberían de personalizarlas, porque a veces los tenemos metidos en un cajón, porque los profesores enseñan lo que saben más no lo que es, si ellos pudieran personalizar y elegir hacia dónde dirigirse, eso pude ayudar a personalizar que es lo que quieren hacer. Es que mira, en realidad, los estudiantes tienen un margen bastante amplio para personalizar sus propias propuestas de valor en la educación superior, pero aquí está el truco: ¡depende de cuánto se involucren. La elección de la universidad y el programa de estudios ya es un primer paso hacia la personalización. Cada institución ofrece una variedad de opciones académicas, desde especializaciones hasta programas interdisciplinarios, y los estudiantes pueden elegir lo que mejor se adapte a sus intereses y objetivos. Luego, dentro del programa, hay aún más espacio para la personalización. Pueden tomar cursos electivos que les apasionen, buscar oportunidades de investigación o pasantías que se alineen con sus metas, y participar en actividades extracurriculares que les permitan desarrollar habilidades específicas. Si se pudiera dejar que los empleadores entraran a las aulas sería muy interesante, ya que se dice la realidad, es una persona únicamente mayor que el estudiante, pero en algún momento fue igual que el estudiante, eso daría mucho para la propuesta de valor. Si los egresados están convencidos, preparados e identificados, eso ayuda mucho a la institución, porque al final es el posicionamiento y preferencia que va a tener la sociedad ante la misma, y si el egresado habla bien de la institución entonces la institución se vuelve muy importante a nivel social, pero si no se tiene estos acercamientos no conocemos lo que el mercado laboral está demandando, entonces la institución se vuelve inservible para la sociedad, es importante que la propuesta de valor puedan estar concadenadas a las que se le ofrecen a los demás actores.
Employer 02 Hay una integración limitada, porque realmente seguimos haciendo muchas estrategias aisladas, y no se ve realmente una integración entre los actores, creo que cada uno sigue trabajando desde su trinchera, desde su frente, haciendo lo que puede, creo que aún falta mucha integración, incluso hay espacios no promueven la integración. Creo que no, creo que, si es distinta en la escuela, tanto públicas como privadas, pero también creo que el estudiante es el último en ser escuchado cuando hacemos el rediseño de un programa, cuando hacemos estrategias pensadas hacia ellos, son pensadas hacia ellos desde nuestra perspectiva, pero creo que pocas veces se involucran. Claro que cada vez empiezan a haber más espacios, tratamos de

involucrarlos en foros, empezamos a ver como más participación, pero realmente venimos de un sistema educativo en donde no están los espacios, y eso lo vemos en muchos ámbitos educativos. - Tendría que ser desde el mismo sistema educativo, tendríamos que hacer reformas a la normativa y empezar a darles voz a los estuantes, de que participen en foros, que sepan del contexto, que sepan que es lo que hay detrás, pero también es muy fácil como estudiantes quejarnos, pero tampoco nosotros les hemos enseñado que sucede, pero también es compartir la información entre todos los actores, con plataformas, con foros, con congresos, visitando escuelas, incluso difundiéndolo en redes. Porque creo que de esta manera podemos sensibilizar el problema que estamos teniendo en la educación, que más bien cada actor ve su perspectiva, su entendimiento y desconocemos, entonces solo juzgamos, criticamos, pero no podemos entender. Más bien yo creo que sería generar espacios donde haya dialogo con todos los actores, pero no hay esos recursos, se habla de ciencia, pero no hay apoyos, se habla de becas y el alumno dice que aún no tiene beca, entonces es reforzar todos estos esquemas.

Lo más importante es sensibilizar, cuando conocemos al alumno nos damos cuenta de que pasa, segundo yo creo que el tema de cambio generacional ha hecho esta brecha, entonces el no comprenderlo nos hace desconocerlo. Entonces yo creo que es compartir, dar este espacio para que contextualicemos y de ahí podamos actuar. Estamos viviendo un tema generacional incluso con los padres.

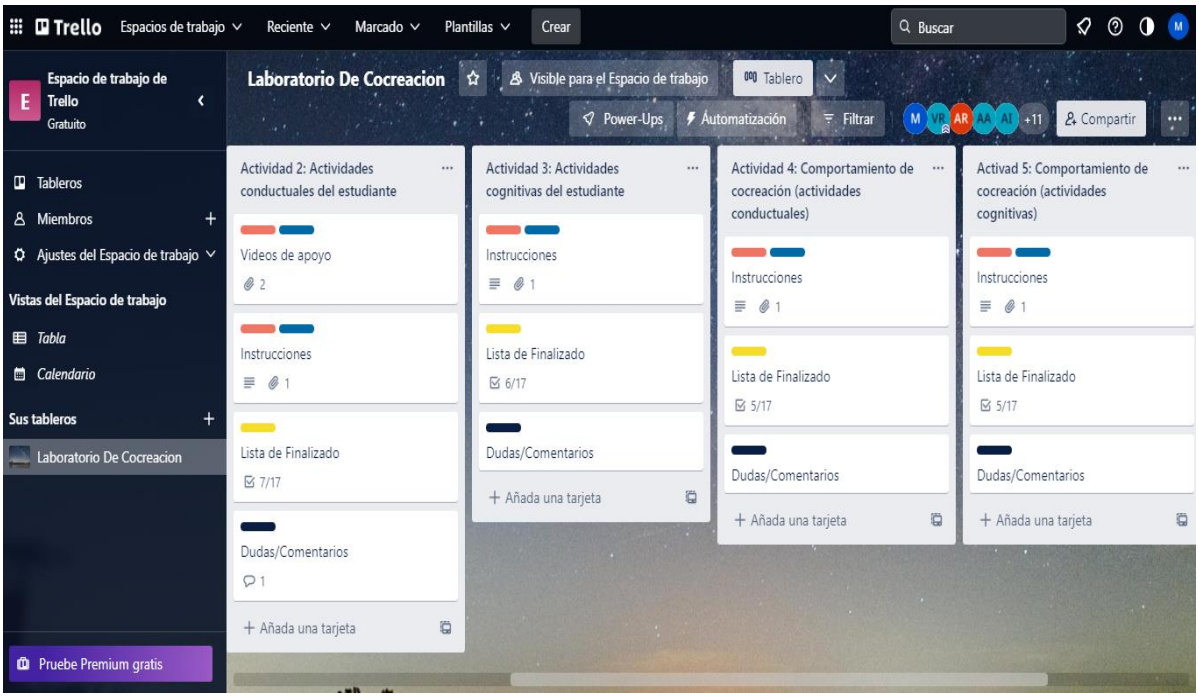
Es este aprendizaje autoadministrado del alumno, realmente yo creo que esa es la co-creación. Solo que siempre hemos pensado que el alumno debe ser participe, pero no sabemos cómo, no se le dan las herramientas para que él sepa cómo ser participe, porque hay muchos actores externos que influyen, y se están descuidando muchos elementos que se pueden retomar para que los estudiantes sepan de donde tener las herramientas, ver desde donde cada uno puede co-crear.

La personalización tiene que ver en función de lo que el estudiante quiere, el principal elemento es identificar que queremos. Hay diferentes perspectivas que se ven en la teoría, pero es difícil que el alumno comprenda los temas porque aún no tiene la experiencia, es ahí en donde estamos frenando el tema, desde la práctica y experiencia, el alumno no sabe por qué auto aprender.

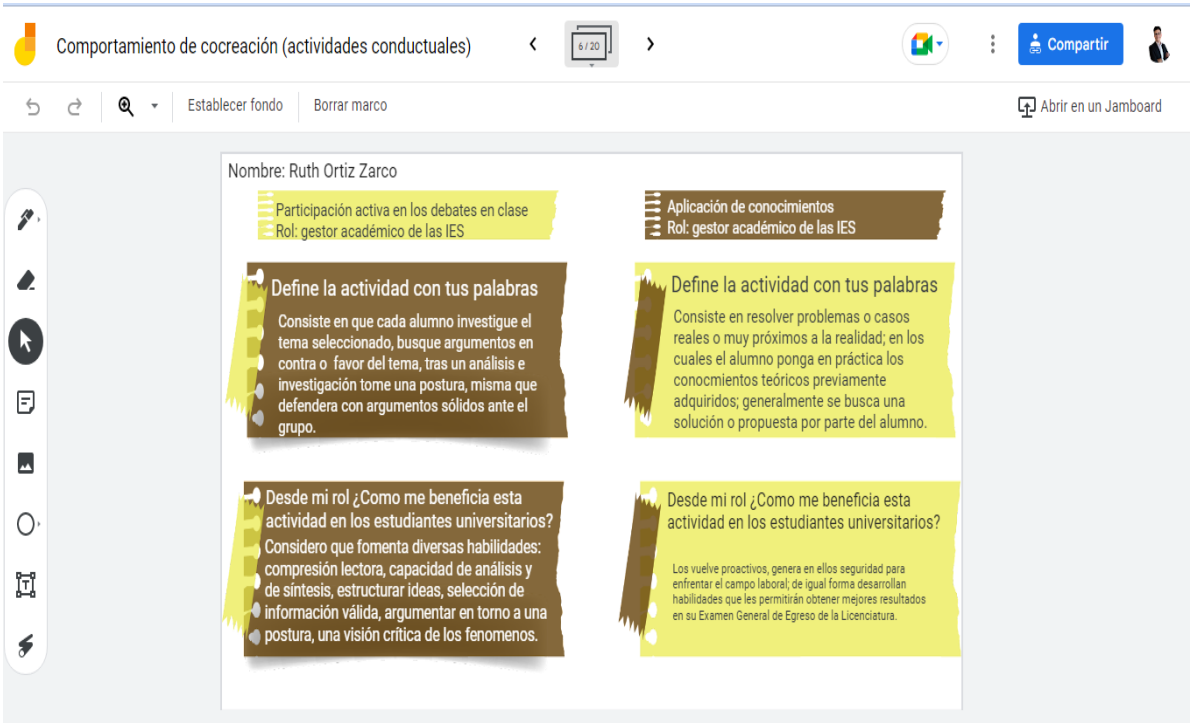
El impacto que se percibe es que los chicos salen sin un proyecto de vida, con estereotipos, e incluso se juzgan generaciones, y también no comprendemos a las nuevas generaciones. Entonces el tema del campo laboral también está cambiando todo el contexto, el tema de las habilidades que no se van a desarrollar en una institución, tienen que ver con el contexto, entonces intervienen muchos actores que deberían de apoyar en el aprendizaje de los chicos. Y por lo mismo ellos salen con problemas psicosociales. - Impacta en que el alumno empieza a ser desmotivado a aguerrido, pero el tema es que tampoco estamos acostumbrados a estos procesos, es extraño para las instituciones, por lo que hay una resolución por parte de las instituciones, pero la solución que dan es la censura, entonces tenemos mucha exigencia por parte del alumno, exige cosas que no pueden ser reales.

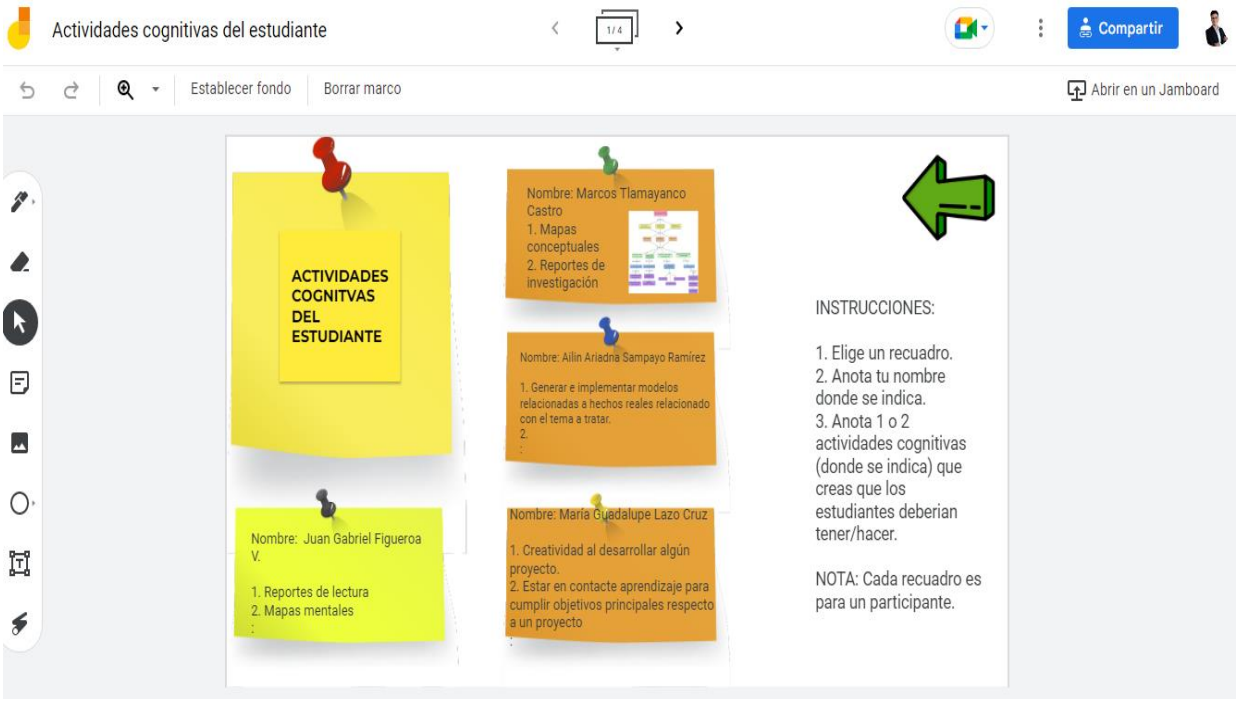
Appendix 02.

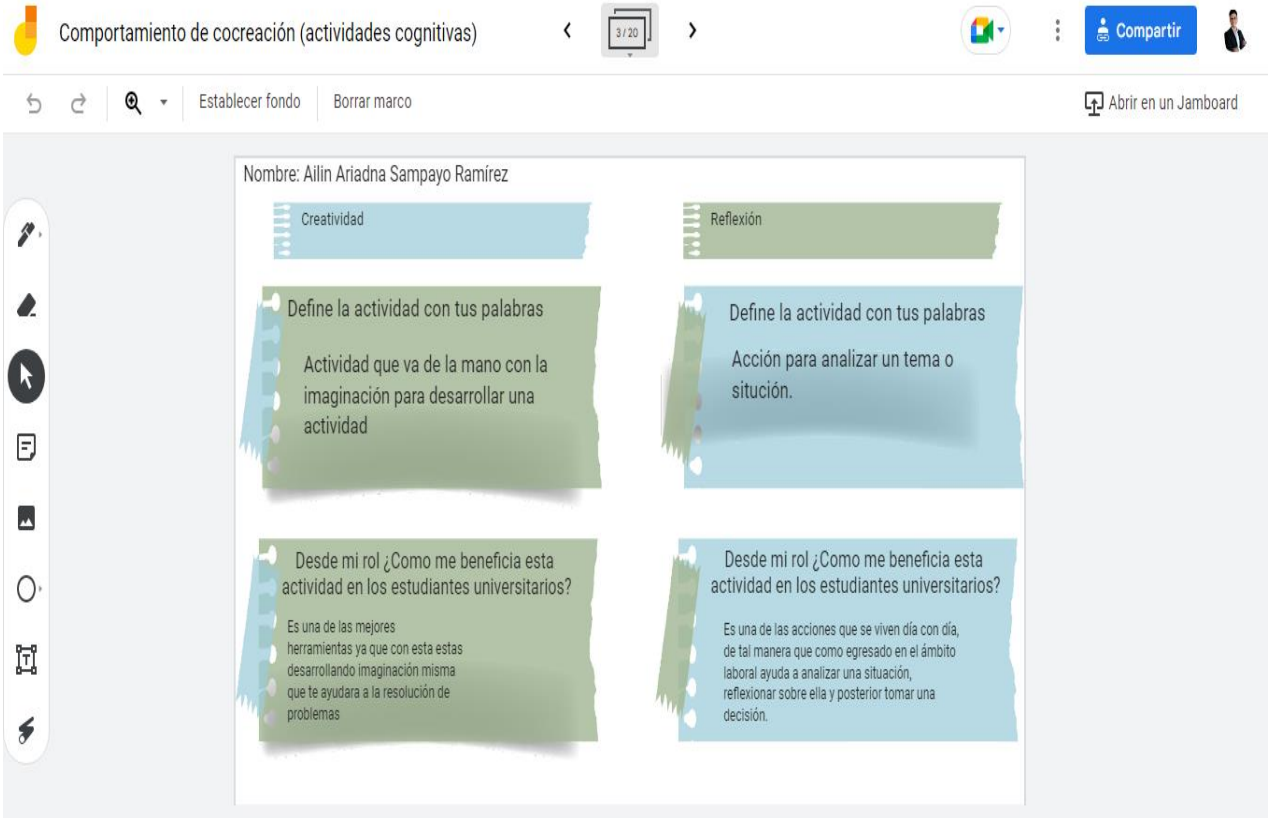
Virtual Co-creation workshop pictures




Mi rol en el ecosistema de la educación superior
1 / 20
Compartir
Establecer fondo
Borrar marco
Abrir en un Jamboard
Estudiante
Nombre: David Flores Vizzueth
¿Quien soy?
Estudio la Licenciatura en Ciencias de la Educación. Me gusta ser alguien extrovertido, sencillo y empático con los demás. Me gusta desenvolverme en el ámbito educativo porque me permite ser un agente de cambio en las futuras generaciones, debido a que puedo cambiar la vida de las personas mediante la educación.
Considero que soy muy ágil desenvolviéndome con las personas, dado que me gusta escucharlos y apoyarles en lo que sea necesario. También me agrada ser alguien organizado, disciplinado, responsable, creativo e innovador.
Mis habilidades
Mi experiencia en el rol
Me gusta participar en las investigaciones, proyectos, tesis y tesinas de mis compañeros, puesto que sé lo que conlleva este proceso. Considero que soy un estudiante de alto rendimiento académico, pues constantemente perfecciono mis conocimientos en diversas áreas.

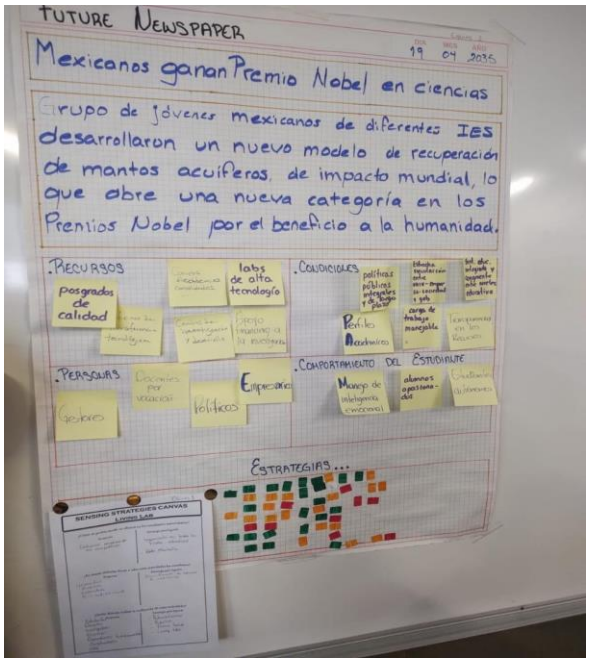

Comportamiento de cocreación (actividades conductuales)
6 / 20
Compartir
Establecer fondo
Borrar marco
Abrir en un Jamboard
Nombre: Ruth Ortiz Zarco
Participación activa en los debates en clase
Rol: gestor académico de las IES
Define la actividad con tus palabras
Consiste en que cada alumno investigue el tema seleccionado, busque argumentos en contra o favor del tema, tras un análisis e investigación tome una postura, misma que defendera con argumentos sólidos ante el grupo.
Desde mi rol ¿Como me beneficia esta actividad en los estudiantes universitarios?
Considero que fomenta diversas habilidades: compresión lectora, capacidad de análisis y de síntesis, estructurar ideas, selección de información válida, argumentar en torno a una postura, una visión crítica de los fenomenos.
Aplicación de conocimientos
Rol: gestor académico de las IES
Define la actividad con tus palabras
Consiste en resolver problemas o casos reales o muy próximos a la realidad; en los cuales el alumno ponga en práctica los conocmientos teóricos previamente adquiridos; generalmente se busca una solución o propuesta por parte del alumno.
Desde mi rol ¿Como me beneficia esta actividad en los estudiantes universitarios?
Los vuelve proactivos, genera en ellos seguridad para enfrentar el campo laboral; de igual forma desarrollan habilidades que les permitirán obtener mejores resultados en su Examen General de Egreso de la Licenciatura.

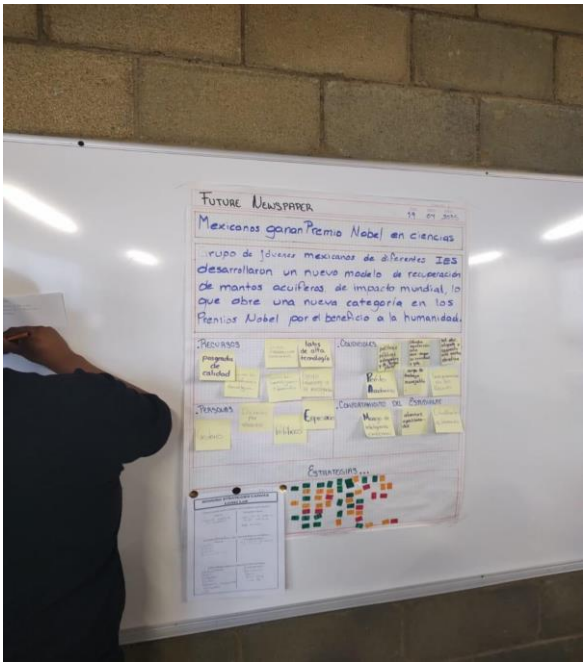

Actividades cognitivas del estudiante
1 / 4
Compartir
Establecer fondo
Borrar marco
Abrir en un Jamboard
ACTIVIDADES COGNITVAS DEL ESTUDIANTE
Nombre: Marcos Tlamayanco Castro
1. Mapas conceptuales
2. Reportes de investigación
Nombre: Ailin Ariadna Sampayo Ramírez
1. Generar e implementar modelos relacionadas a hechos reales relacionado con el tema a tratar.
2.
Nombre: Juan Gabriel Figueroa V.
1. Reportes de lectura
2. Mapas mentales
Nombre: María Guadalupe Lazo Cruz
1. Creatividad al desarrollar algún proyecto.
2. Estar en contacte aprendizaje para cumplir objetivos principales respecto a un proyecto
INSTRUCCIONES:
1. Elige un recuadro.
2. Anota tu nombre donde se indica.
3. Anota 1 o 2 actividades cognitivas (donde se indica) que creas que los estudiantes deberian tener/hacer.
NOTA: Cada recuadro es para un participante.

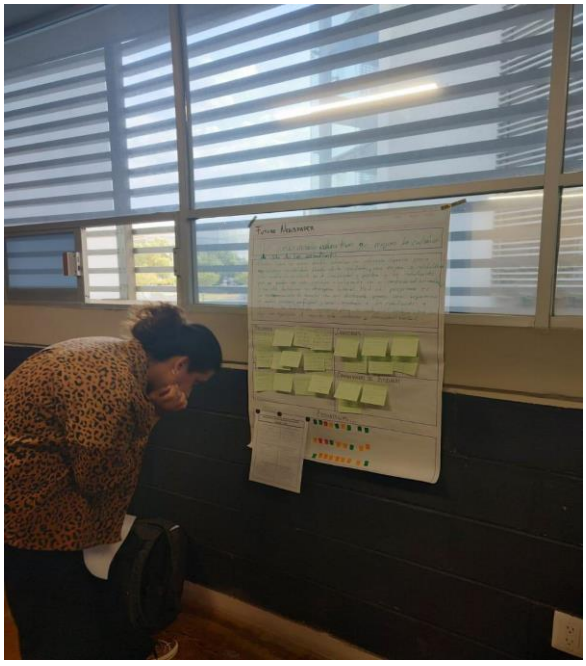

Comportamiento de cocreación (actividades cognitivas)
3 / 20
Compartir
Establecer fondo
Borrar marco
Abrir en un Jamboard
Nombre: Ailin Ariadna Sampayo Ramírez
Creatividad
Define la actividad con tus palabras
Actividad que va de la mano con la imaginación para desarrollar una actividad
Desde mi rol ¿Como me beneficia esta actividad en los estudiantes universitarios?
Es una de las mejores herramientas ya que con esta estas desarrollando imaginación misma que te ayudara a la resolución de problemas
Reflexión
Define la actividad con tus palabras
Acción para analizar un tema o situción.
Desde mi rol ¿Como me beneficia esta actividad en los estudiantes universitarios?
Es una de las acciones que se viven día con día, de tal manera que como egresado en el ámbito laboral ayuda a analizar una situación, reflexionar sobre ella y posterior tomar una decisión.

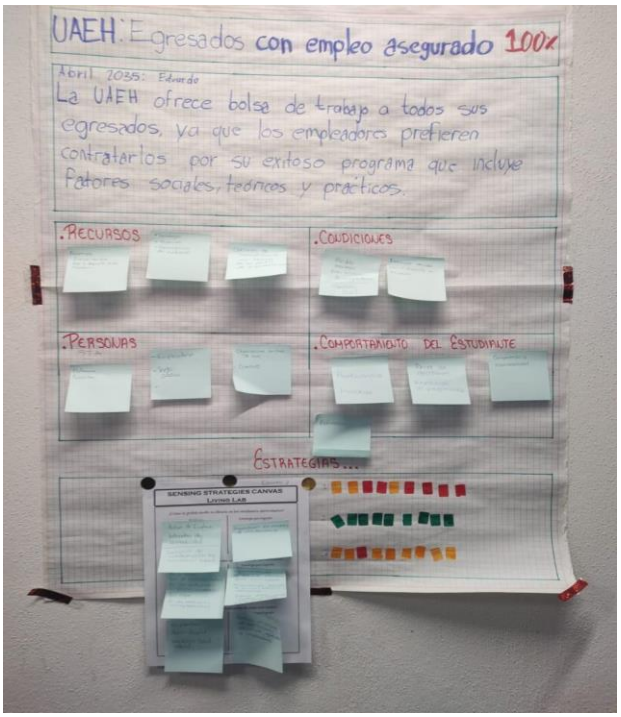
Appendix 03.

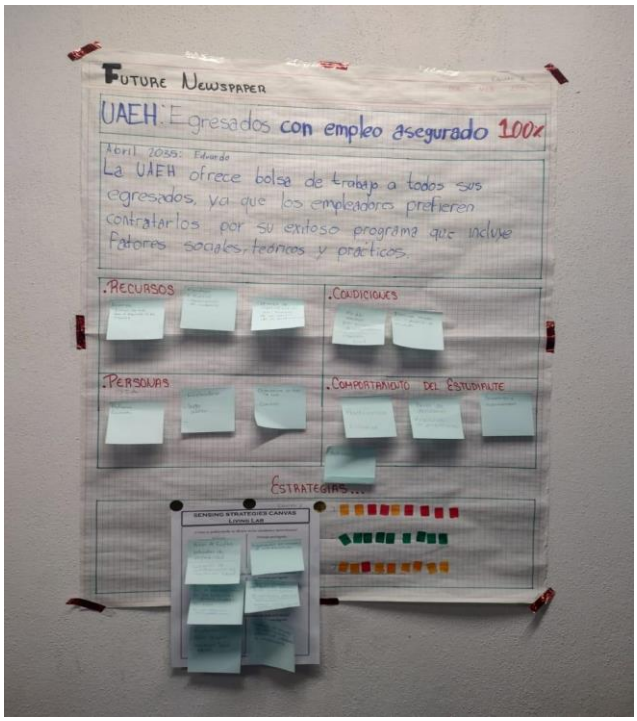
Face to face Co-creation workshop pictures

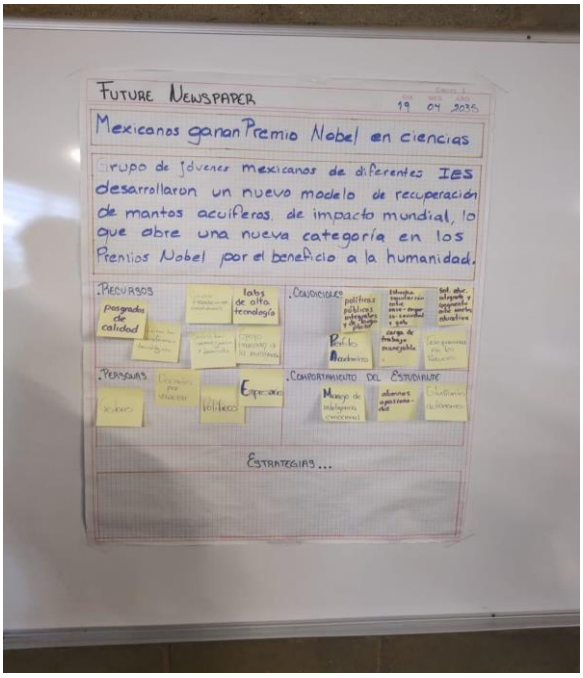


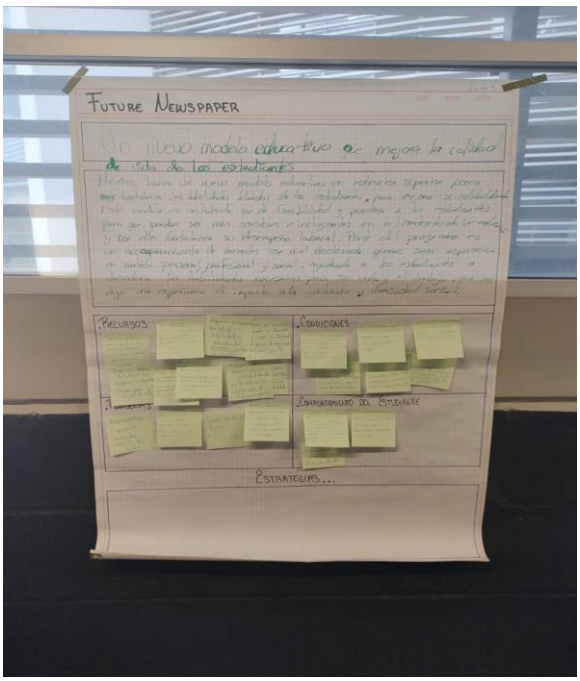


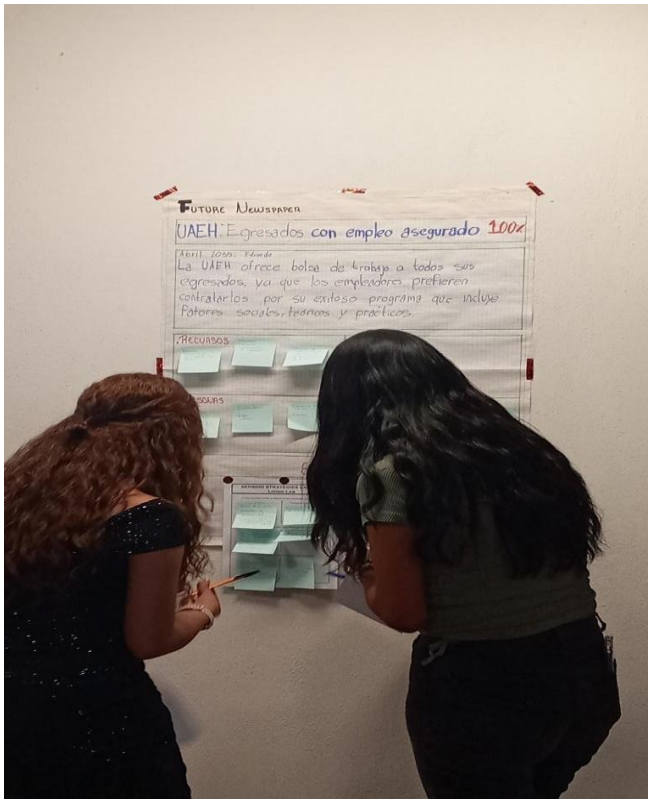


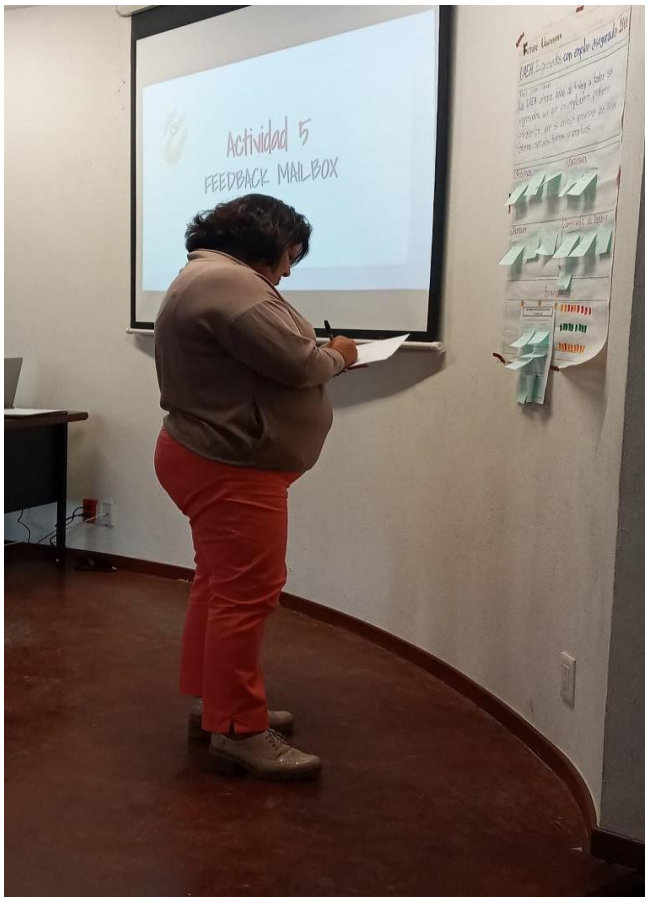

UAEH: Egresados con empleo asegurado 100%
Abril 2055: Eduardo
La UAEH ofrece bolsa de trabajo a todos sus egresados, ya que los empleadores prefieren contratarlos por su exitoso programa que incluye factores sociales, teóricos y prácticos.
.RECURSOS
.CONDICIONES
.PERSONAS
.COMPORTAMIENTO DEL ESTUDIANTE
ESTRATEGIAS...
SENSING STRATEGIES CANVAS
LIVING LAB


FUTURE NEWSPAPER
UAEH: Egresados con empleo asegurado 100%
Abril 2055: Eduardo
La UAEH ofrece bolsa de trabajo a todos sus egresados, ya que los empleadores prefieren contratarlos por su exitoso programa que incluye factores sociales, teóricos y prácticos.
.RECURSOS
.CONDICIONES
.PERSONAS
.COMPORTAMIENTO DEL ESTUDIANTE
ESTRATEGIAS...
SENSING STRATEGIES CANVAS
LIVING LAB


FUTURE NEWSPAPER
19 04 2035
Mexicanos ganan Premio Nobel en ciencias
Grupo de jóvenes mexicanas de diferentes IES desarrollaron un nuevo modelo de recuperación de mantos acuíferos, de impacto mundial, lo que abre una nueva categoría en los Premios Nobel por el beneficio a la humanidad.
.RECURSOS
posgrados de calidad
bases de alta tecnología
.CONDICIONES
políticas públicas
.PERSONAS
Especialistas
.COMPORTAMIENTO DEL ESTUDIANTE
ESTRATEGIAS...

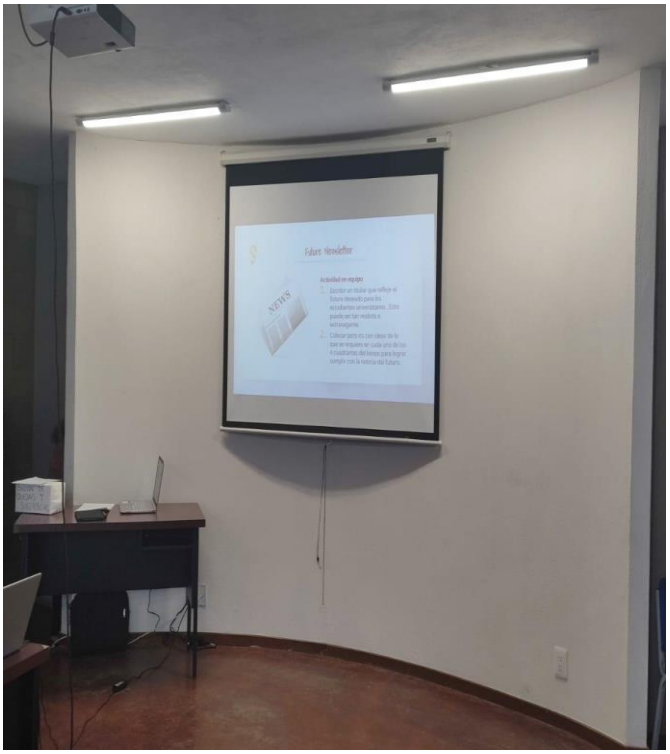

FUTURE NEWSPAPER
.RECURSOS
.CONDICIONES
.COMPORTAMIENTO DEL ESTUDIANTE
ESTRATEGIAS...


Future Newspaper
UAEH: Egresados con empleo asegurado 100%
La UAEH ofrece bolsa de trabajo a todos sus egresados, ya que los empleadores prefieren contratarlos por su exitoso programa que incluye factores sociales, teóricos y prácticos.
Recursos


Actividad 5
FEEDBACK MAILBOX


Future Newspaper


UAEH: Egresados con empleo asegurado
La UAEH ofrece bolsa de trabajo a todos sus egresados, ya que los empleadores prefieren contratarlos por su exitoso programa que incluye factores sociales, teóricos y prácticos
RECURSOS
CONDICIONES
PERSONAS


Future Newsletter
NEWS