

## **BASIC TEMPLATE FOR CODING TEMPLATE**

- Codes are utilized in qualitative research as a method for labeling data
- In Vivo codes are emergent codes during the examination of current data
- A priori codes are codes that come before examination of the current data
- Subcodes may be used to help
- While looking through your data, it can be helpful to pick out an example or multiple examples to reference when coding your data

**Evaluating, creating, and labeling codes on to your data should be done multiple times to ensure you have thoroughly examined and labeled your data!**

**Codebook Example and Template is given below in two separate tables**

### Engineering Identity Development – Codebook Example

CODE	DEFINITION	Example
<b>Rigor</b>	Student rigor involves challenging students to engage deeply with material, think critically, and apply consistent effort to achieve high academic standards, fostering intellectual growth.	
Rigor (positive)	Student rigor inspires students to embrace challenges, think critically, and engage deeply with material, encouraging intellectual curiosity, perseverance, and growth in a supportive and stimulating environment.	“The course pushed me to think critically and dive deeper into the material. Even though it was challenging, I felt like I grew as a student, and my understanding of the subject improved significantly.”
Rigor (negative)	Student rigor can become detrimental when it results in excessive pressure, rigid thinking, and an overwhelming workload, leading to stress, burnout, or a focus on performance over learning.	“The workload was so overwhelming that I didn’t have time to actually absorb the content. It felt like I was just rushing through assignments without really learning anything.”
<b>Engineering Identity: Interest</b>	Reflects a student’s passion and curiosity for engineering, including their desire to engage with engineering topics, participate in engineering-related activities, and pursue the field as a long-term career.	
Interest (positive)	Students are genuinely excited and curious about engineering. They actively seek out opportunities to learn, explore, and innovate, fostering a deep, sustained passion for the field.	“I love how engineering allows me to create real-world solutions. I’m always excited to learn new techniques and apply them to projects. It feels like I’m shaping the future.”
<b>Interest (negative)</b>	A lack of interest can result in disengagement or indifference, with students viewing engineering as	“I just don’t find engineering exciting anymore. I’m going

	merely a requirement rather than a passion, which hampers long-term commitment and creativity.	through the motions because I have to, but it's not something I feel passionate about.”
<b>Engineering Identity: Persistence/Competence</b>	Refers to students' belief in their ability to understand and apply engineering knowledge and skills. It includes both actual demonstrated skills (performance) and self-perceived capability (competence) to solve engineering problems.	
Persistence/Competence (positive)	Students feel confident in their ability to apply engineering concepts and solve problems effectively. They demonstrate strong skills and continually improve their understanding through practice and feedback.	“I feel confident in my ability to solve complex engineering problems. Every time I complete a difficult project, I prove to myself that I belong in this field.”
Persistence/Competence (negative)	Students may doubt their competence, even when performing well, or overestimate their abilities, leading to frustration or poor outcomes. Lack of confidence can prevent them from fully engaging in engineering tasks.	“Even when I do well, I constantly second-guess myself. I worry that I don't actually have the skills to succeed as an engineer.”
<b>Engineering Identity: Recognition</b>	Involves being recognized by others (e.g., peers, educators, professionals) as someone who has the qualities of an engineer. This external validation helps reinforce a student's self-concept as an engineer, contributing to their sense of belonging in the field.	
Recognition (positive)	Students are acknowledged by peers, educators, and professionals as capable engineers, which boosts their confidence and reinforces their sense of belonging in the engineering community.	“My professor told me that my approach to solving the problem was innovative, and that really boosted my confidence. It made me feel like I was truly on the path to becoming an engineer.”
Recognition (negative)	A lack of recognition or negative feedback from others can undermine a student's confidence and sense of identity as an engineer, leading them to question their fit within the profession.	“I put a lot of effort into my design, but no one seemed to notice or acknowledge my work. It makes me feel invisible and question

		whether I even fit in with the rest of my peers.”
--	--	---

- The definitions and quotes in the example were procured with Chat GPT

**[Project Name] – Codebook Template**

CODE	DEFINITION
<b>CODE</b>	Definition
Subcode	Subcode Definition
<b>In Vivo CODE</b>	In the example above we Rigor as a code
Emergent subcode	In the example above we have two subcodes for the parent code <b>Rigor</b> . These subcodes are used to distinguish between positive and negative experiences of rigor
<b>A Priori Codes</b>	In the example above, components of engineering identity, such as interest, are used as codes because engineering identity is being investigated
A priori Subcode	A subcode from