



The CSCCE Community Participation Model

A framework to describe member engagement and information flow in STEM communities

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Citing and reusing this guide

CITATION AND REUSE

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Background for the model

Many STEM organizations and informal groups are using the term community to describe their members - whether they're a professional association, an extra-institutional community of practice or an organization that exists to provide infrastructure services such as training or standards setting. Additionally, academic research also consists of communities which might include scientists in the same field, grant program or large-scale collaboration.

With this broad-reaching emphasis on community there comes a need for community-building expertise - a role performed by scientific community engagement managers, the human infrastructure for collaboration. But how should community engagement managers describe the range of member activities seen within their communities - from unconnected newsletter consumers to highly active working group chairs? And how can describing community member engagement help to set funder expectations, improve programming, and equip a community manager to succeed?

It is with these questions in mind that staff at the Center for Scientific Collaboration and Community Engagement (CSCCE) created the CSCCE Community Participation Model.

The model

The CSCCE Community Participation Model describes four modes of member engagement that can occur within a community – CONVEY/CONSUME, CONTRIBUTE, COLLABORATE, and CO-CREATE - and one that can occur both inside and outside of it: CHAMPION. All modes may be present at once, with some members interacting in multiple modes - or a community may have member engagement that falls into only some of the modes described.

In this short guide, we outline what each of the modes looks like and answer some frequently asked questions about the model. The model is shown in graphical form in Figure 1 on the next page.

- Across the top you will see three forms of information flow: TRANSMISSIVE, TRANSACTIONAL, and TRANSFORMATIONAL.
- Below that, the four major modes of community participation, CONVEY/CONSUME, CONTRIBUTE, COLLABORATE, and CO-CREATE.
- How these forms of information flow map onto the four modes is described in more detail below.
- Next, you will see a network diagram representation of community member interactions, which is further described in terms of INTERACTIONS, GOALS, COMMUNITY ACTIVITIES, and POWER BALANCES.
- Below that, the CHAMPION mode (see below for details).
- The last row offers a SLOGAN, which you can use to conceptualize the attitude of a convening organization engaging in each mode.

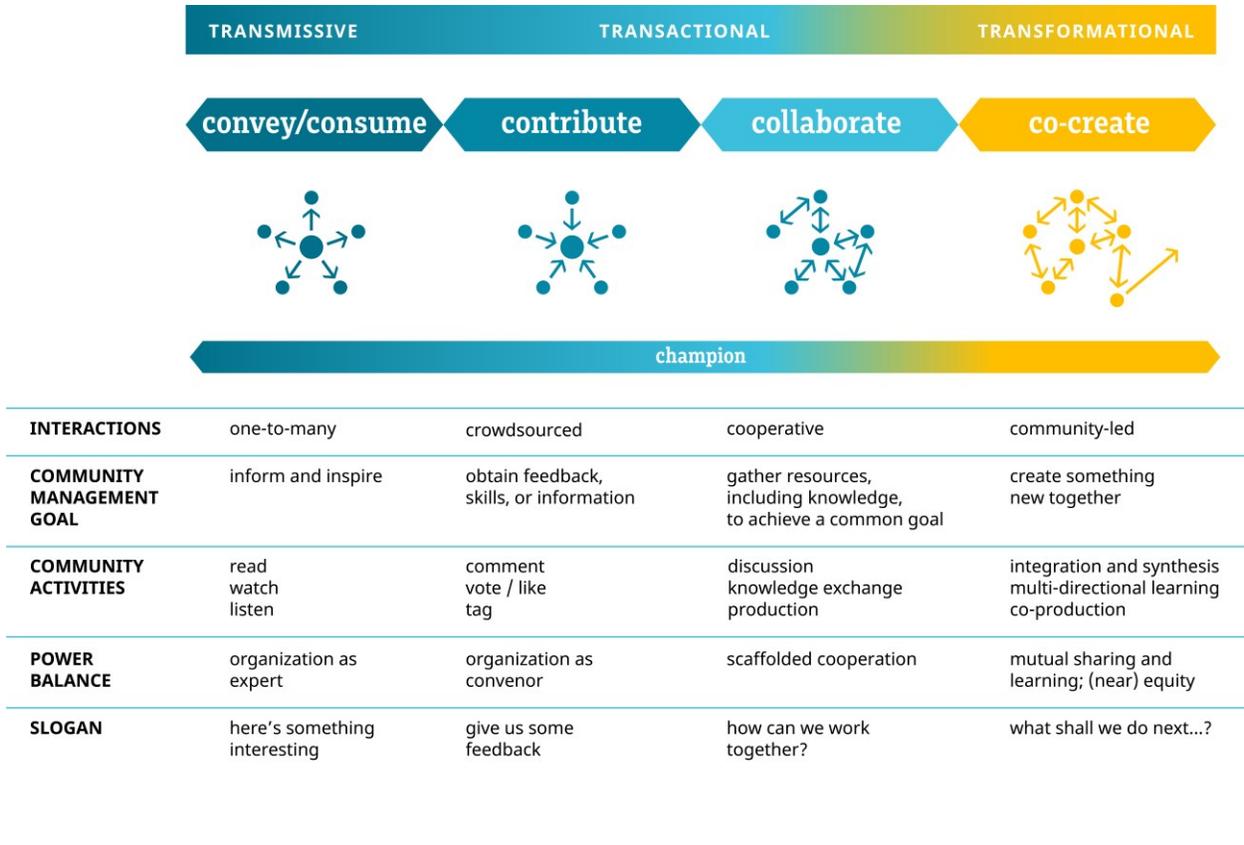


Figure 1. The CSCCE Community Participation Model
The model describes four modes of community member participation, CONVEY/CONSUME, CONTRIBUTE, COLLABORATE, and CO-CREATE, as well as a fifth “super user” mode, the CHAMPION mode. Member activities are generally convened or scaffolded by a community manager, who usually represents an organization or institution. See page 3 for a full description of this figure.

In the rest of this guide we will dive deeper into how the model can be used to assess your community, describe the actions of your community members, and help guide programming to meet your goals.

What is the model for?

We created this model to help community managers and others interested in community-building describe the activities and associated information flow within any community using a common framework and language. The model enables the mapping of community member behaviors to programming and other infrastructural support that the community manager, convening organization, or funder may provide to the community.

EXAMPLE:

A citizen science project that uses an online platform to host an activity where participants tag different animals that they identify in photographs would represent group members operating in the CONTRIBUTE mode. This would be based on clear instructions about how to do so. Such projects may not involve any other modes if a participant chooses simply to engage anonymously for fun. Adding a discussion forum where results of the data analysis are shared with contributors might result in group members entering the COLLABORATE mode where they discuss the findings and make suggestions for future directions.

Being able to talk about what happens within a community in such a structured way is useful for troubleshooting challenges such as poor engagement, as well as planning future activities such as what programming and staffing would support members in collectively achieving community goals.

How do we define each mode?

Each of the first four modes in the CSCCE community participation model describes the manner in which community members interact with one another WITHIN the community.

CONVEY/CONSUME - groups usually begin in this phase, with a community manager or communications professional CONVEYing information for members to CONSUME independently of one another. This might look like a regular newsletter to an email list, social media posts to followers, or other broadcast communications.

CONTRIBUTE - in this mode, members are empowered to CONTRIBUTE in some way. Often these contributions are invited or facilitated by a community manager, especially in the early stages of a community, and might include presenting on a webinar, writing a guest blog post, or sharing resources on a community platform. One function of the contribute mode is to enable members to discover the skills and interests of others in the group by making knowledge more visible.

COLLABORATE - in this mode members of a community COLLABORATE with one another, often without needing an explicit invitation from the community manager. Such collaborations might include co-authoring a white paper or blog post and may involve infrastructure created or maintained by the community manager, but used more independently by community members. For example, there may be general guidelines for writing a guest blog post that the community manager has created, but co-authors work together without the community manager to write the post.

CO-CREATE - most common within established communities, this mode describes how members work together WITHIN the community to CO-CREATE something that they couldn't do before. For example, community members might organize an event together, form working groups to push the work of the community forward, or establish new communication channels such as a podcast.

In addition to the four modes that describe member interactions within the community, there is a fifth mode that describes a meta-level of engagement:

CHAMPION - the champion mode is when a community member is motivated to take on more responsibility for the success, sustainability, and/or running of the community. This might look like advocating for the community on social media, running a working group or local chapter, or taking the lead in creating and maintaining documentation to support the community.

This can be thought of as a meta-mode describing actions both within and outside of the community. A community CHAMPION may use any of the four modes described above in their CHAMPIONing

activities (e.g., CONVEY: they post on social media to spread the word more widely; CONTRIBUTE: they host a local event to bring others together; COLLABORATE: they host a working group call; CO-CREATE: they run trainings or other activities for others in the community). In effect, a CHAMPION acts to supplement the work of the community manager in any or all of the four modes, and as such can be thought of as an emergent leadership role. A member acting in CHAMPION mode may or may not be part of a formal champion, ambassador, or advocacy program run by the community.

See also Table 1 in the Appendix for specific examples of how common community programming maps to the different modes of member participation.

How does the role of the community manager change in the different modes?

As a community traverses these four modes of community member participation, the role of the community manager evolves and adapts. In CONVEY mode, the community manager acts as the purveyor of information, socializing new members about the goals of the community and signposting how they can get involved. In this phase, the community manager might also seek feedback from the community, and start to foster connections between members. For most communities, the community manager will always spend at least some of their time working in the CONVEY mode, for example by publishing monthly newsletters to update the community.

As community members start to CONTRIBUTE and COLLABORATE, the community manager acts more as an instigator or facilitator. Instead of creating resources and events, now the community manager invites others to do so and provides the technical or practical support for them to be successful (e.g., by hosting regular community calls or webinars featuring members and experts).

Once community members are comfortable with CO-CREATION, however, the role of the community manager changes again, cheerleading member efforts and sharing them more broadly rather than participating directly (e.g., by CONVEYing their accomplishments in a newsletter, press release, or social media post).

If you are working with a community that continues to welcome new members to join, you will be regularly onboarding those members and helping them move from the CONVEY/CONSUME mode to more engaged modes. Meanwhile, some of your existing community members will be entering the more engaged COLLABORATE and CO-CREATE modes, where you will need to additionally support working groups and other activities. It's at this point that you may need to hire a second community manager to continue to support the new members who join – or seek CHAMPIONS from within the community to take on some of these tasks.

How does information exchange evolve over the different modes?

In addition to the four different core modes, the model also has three ways of describing how information flow changes across the modes - moving from transmissive to transactional to transformational.

The TRANSMISSIVE mode maps directly with the CONVEY/CONSUME mode, where the goal in terms of information flow is to transmit information, without any assumed direct response to the person or organization conveying the message (other than, for example, clicking a link).

The TRANSACTIONAL mode of information flow maps to the CONTRIBUTE and most of the COLLABORATE modes of member participation. These modes are TRANSACTIONAL because there is information *exchange* and the rules/ways that information is exchanged are usually clearly defined. In the CONTRIBUTE mode this is often with the convening organization acting as host of a platform/venue for contribution, without much, if any, interaction between members. In the COLLABORATE mode the convening organization creates structured opportunities for information exchange *between* members, such as a monthly community call.

Towards the end of the COLLABORATE mode and into the CO-CREATE mode, community members start to exchange information in a more TRANSFORMATIONAL manner - one in which new information is created and applied - often in not-entirely-predictable ways. This integration of knowledge, as seen in successful inter-disciplinary collaborations, is sometimes described as the “you bring chocolate, I bring hazelnuts, and together we make Nutella.” That is, the product of the integrated information is distinct from the individual inputs (not just chocolate-covered hazelnuts). It is in this mode that the full potential of community can begin to be realized. It is also in at the TRANSFORMATIONAL stage that members may take what they have learned within the community and start to use it elsewhere - in primary roles or other communities to which they belong. This may result in the community member shifting into the CHAMPION mode.

In the CHAMPION mode, information generated by the community might be intentionally disseminated more broadly - into other communities or to others who may subsequently join the community. This could look like sharing specific products such as reports, manuals, and publications, or communications such as tweets, conference presentations, and interviews. Advocacy for the community and its goals, values and activities often forms part of this CHAMPIONing activity.

How does the model relate to power balances?

As an organization or individual convening community members, the way that you structure your programming and governance will establish and/or reinforce how power is distributed in your community. If you're predominantly using the CONVEY/CONSUME mode, you are positioning your organization or yourself as the expert. As you move to the CONTRIBUTE mode, inviting input from

community members, the balance shifts to acknowledging more explicitly that member contributions are valued. And in the COLLABORATE mode, power becomes even further distributed as members interact without the organization always serving as a catalyst in those conversations, although the organization likely will provide and connect the structures in which the collaboration happens – such as hosting monthly community webinars or providing support and guidance for working groups.

In the CO-CREATE mode, power is further distributed, with emergent community leaders/CHAMPIONS taking on more independent activities that include running sub-groups (e.g., working groups and special interest groups). Negotiating this transfer of power while retaining alignment around shared community norms, values, and goals is an important facilitating role of the community manager. Depending on the community and its goals, this may include creating training for new emergent leaders, or providing a structure such as a community council where those emergent leaders have direct input into community governance.

How does the infrastructure needed to support community activities change with the different modes?

For each mode, the convening organization/community manager will need to provide infrastructure that supports the type of engagement members are participating in. In an ideal world, the community manager will be able to pre-empt (through responsive programming) many of these needs such that they are able to create new processes and deploy new tools right as the community members come to need them. Here are some examples of what that might look like in terms of changing technology and programming needs in the different modes:

- **CONVEY** - this mode requires basic, broadcast tools such as a mailing list tool and social media accounts. These are generally free, but require people to create content and manage interactions.
- **CONTRIBUTE** - for members to contribute to a community they need to have a platform on which to do so. This may involve a custom build or an “off the rack” solution such as a blog or social networking/member engagement platform.
- **COLLABORATE** - this mode might require additional features, such as mentoring, collaborative document authoring, and tools for the curation and discoverability of materials. It might also require in-person programming and event planning, e.g., scheduling synchronous work.
- **CO-CREATE** - again a combination of online and in-person events may be needed to facilitate working groups, newly-formed committees, or training. If these occur on a large scale there will be funding considerations.

Is it better to be in a certain mode?

We try to avoid value judgements when discussing the different modes of the CSCCE community participation model. What's important is that the mode(s) you support is(are) serving to achieve the goals of the community. For example, if you want to nurture a mature community of practice, there need to be opportunities to get all the way to the CO-CREATE mode, where new knowledge is generated and used together. If instead your goal is to keep a large membership base informed of news from your association then you may stay predominantly in the CONVEY/CONSUME mode, with some occasional invitations for members to CONTRIBUTE.

Strictly speaking, a group that exists only in the CONVEY/CONSUME phase is not what CSCCE would define as a community. However, we understand that the word "community" is increasingly used in multiple contexts, which is why the participation model is helpful for understanding how different organizations conceptualize their members' interactions.

It is tempting to see the model as a means to an end, with getting 100% of your members into the CO-CREATE phase as a metric for success. However, this is not the case. For example, if you are consistently adding new members to your community it is unrealistic to expect them to jump right into co-creation with other members. Furthermore, members of your community may fluctuate in their level of commitment, oscillating back and forth between modes. When using this model to assess your community, keep in mind your goals and community context and then design your metrics for success accordingly.

Can multiple modes exist at once in the same community?

Yes, absolutely! Often, a community will have members who are participating using more than one mode, e.g., reading a newsletter (CONVEY/CONSUME) and answering questions in an online forum (CONTRIBUTE).

Furthermore, a community is not one homogenous group of members with the same level of commitment to the group, so you will need to design multi-modal programming that allows for multiple modes of participation. This could look like clear invitations to new members to CONTRIBUTE - to help them to move from simply reading (CONSUME) content posted by others to taking a more active role.

Relatedly, outputs from smaller working groups where COLLABORATION and CO-CREATION are occurring will need to be shared with the main community, so the CONVEY/CONSUME mode is again required to keep everyone informed.

We often talk about the importance of a community manager in scaffolding member participation. In the context of a large community with multiple working groups, scaffolding looks like: clear

onboarding instructions for working group leaders, regular mechanisms such as a newsletter and/or community calls for sharing working group outputs, and clear pathways for new members to discover and become active in working groups that align with their interests. Community members are usually more excited by the activities they want to engage in than about constructing the infrastructure to maintain them, which is why this work is best performed by someone in a separate facilitation role (this could be the community manager or stipended community CHAMPIONS).

Are the modes really discrete or do they blur on a continuum of engagement activities?

We don't think that community members are necessarily rigidly confined to any one of the modes. The more you start to analyze the precise actions that members might take in a certain mode, the clearer the stepping stones to entering neighboring modes become. For example, showing up to a webinar may describe a member in CONSUME mode. Asking a question in the online chat window shifts the member into CONTRIBUTE mode, but if that question lingers unanswered, the member may revert to the CONSUME mode. By contrast, a conversation that starts in chat could inspire that member into the COLLABORATE mode, with multiple members exchanging ideas back and forth.

Sometimes - as in the webinar example - the transitions between modes can be swift. At other times, such as when a community is large and predominantly online, it can be a lot harder to help members move between the different modes. The community manager, therefore, can be viewed as a catalyst for releasing the multi-modal potential of community members - by designing programming that lowers the barriers to multiple modes of participation.

Should all communities be trying to get to the co-create stage?

Not necessarily. This is going to depend on a number of things, including the goals of the community and the comfort level of the convenor or convening organization with ceding some control to community members. (See section above on power balances). It will also depend on available infrastructure, both technological and human. For example, getting community members into the CO-CREATE mode takes work on the part of the community manager to foster trust, broker connections, and provide multiple opportunities and/or invitations to CONTRIBUTE and COLLABORATE, first. With insufficient community leadership - in the form of staff or community CHAMPIONS - it is unlikely that a large portion of community members will reach the CO-CREATE mode since the community manager will be, likely by necessity, spending the majority of their time on CONVEY and CONTRIBUTE tasks.

When assessing your own community, make sure you first assess your goals. With those in mind, our model can help you address how you should be encouraging your members to participate as well as

identify potential roadblocks for why they might not be doing so.

How does CSCCE use this model?

We use the community participation model in our community management fundamentals training module, in which we encourage new and existing community managers to revisit their community strategy and describe it to others using shared language and frameworks.

We also use the modes of participation in custom training and consultancy work when helping senior managers and community managers think about how their programming is or isn't supporting the member engagement that they'd like to see within their community or collaboration.

Can you help me relate this model to my community?

Yes! As part of our consultancy service we can help you to relate the CSCCE community participation model to your specific community. This might look like:

- Auditing which modes exist within your community - and how current programming supports members in each mode.
- Identifying target modes for your community for the next year or more.
- Trouble-shooting why your community members may not be progressing beyond a particular mode.
- Helping you to plan programming and reinforce communications to fill any gaps revealed by the model.
- Examining power dynamics and governance structures within your community.
- Identifying emergent leadership needs within your community - and how to create structures to support those leaders.

We also offer trainings for larger groups and teams, both modular and customized, using this model as a framework.

To learn more, please visit our [trainings](#) page or contact us directly by emailing info@cscce.org.

Appendix: How programming supports member engagement

Table 1 offers a non-exhaustive list of programming examples you might use to engage members in your community, and how they map onto the modes of engagement identified in our model (CONVEY/CONSUME, CONTRIBUTE, COLLABORATE, CO-CREATE, and CHAMPION).

Example programming	CONVEY/CONSUME (community manager or communications professional CONVEYs information for members to CONSUME independently of one another)	CONTRIBUTE (members are empowered to CONTRIBUTE in some way, and often these contributions are invited or facilitated by a community manager)	COLLABORATE (members of a community COLLABORATE with one another, often without needing an explicit invitation from the community manager)	CO-CREATE (members work together within the community to CO-CREATE something that they couldn't do before)	CHAMPION (a community CHAMPION is motivated to take on more responsibility for the success, sustainability, and/or running of the community)
Newsletter	Community members read content in the newsletter which is compiled and distributed by the community manager.	Community members submit content to the community manager for inclusion in the newsletter.	N/A	N/A	Champion forwards the community newsletter to potential new members or creates and sends their own newsletter to a local group or working group that they manage.
Website	Community members attend a webinar and listen to content curated by the community manager.	Community members submit a question before or during the webinar and/or contribute notes to a shared collaborative document during the webinar.	Community members engage in a back-and-forth discussion in the text chat during the webinar, which is moderated by the community manager.	N/A	Champions may volunteer to design and lead a webinar e.g. as a working group lead
Blog posts	Community members read blog posts which are written and/or edited by the community manager.	Community members add comments or questions to a blog post, or offer to author a guest post.	Community members may work together to co-author a guest blog post, with editorial support from the community manager.	N/A	Champions may forward the summary blog post to others who may be interested in the topic.
Online discussion threads	Community manager or community member starts a discussion to share information.	Community manager or community member explicitly asks for input in answering a question, gathering experiences or other resources via the discussion comments.	Community members engage in back-and-forth dialogue in the discussion comments e.g. to compare experiences or discuss specific resources in more detail.	N/A	Champions mention or invite others that they know have valuable experience or knowledge to contribute to the discussion thread.
Conferences	Community members attend sessions and learn from their peers and mentors.	Interactive activities such as voting, using in-session polls, or submitting questions create opportunities for community member participation .	Panel discussions provide an opportunity for several members to explore a topic together .	Unconference sessions or collaborative sprints permit members to synthesize expertise to problem solve and create something new together.	Champions might serve on the conference organizing committee, volunteer to convene a panel, or lead an unconference session.
Co-authoring a resource	Community members consume the resources, e.g., by reading about them in the community newsletter as distributed by the CM.	Community members submit links, e.g. into a Google doc created by the CM (without interacting with one another) or are recruited to provide feedback on a draft.	Community members write sections of a document related to their areas of expertise in a process facilitated by the CM.	Members work together to combine their individual experiences into a synthesis of recommendations.	Champions may suggest others to include in the resource-creation and help with dissemination of the finished resource into other communities.

Table 1. Programming examples for member engagement